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DR. BRONSON'S CASE OF
SYMMETRICAL CUTANEOUS ATROPHY OF THE EXTREMITIES

JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

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No 1.

Original Communications.

A CASE OF SYMMETRICAL CUTANEOUS ATROPHY OF THE EXTREMITIES.*

By EDWARD BENNET BRONSON, M. D.,

Professor of Dermatology in the New York Polyclinic.

MR. PRESIDENT AND GENTLEMEN:
The case which I am about to report, while not a unique one, is nevertheless such a rare form of atrophy of the skin that it has seemed to me not unworthy of engaging your attention. The patient exhibiting the peculiar affection was sent to me at the Polyclinic by Dr. F. P. Griswold, of Meriden, Conn., about the middle of last October. I was then only able to make a few notes and secure some indifferent photographs before the patient returned to his home. A second visit was paid me at my request about one month ago. At this time I could not see that any changes had taken place in the appearances of the disease during the six months' interval. Apparently the case had remained quite stationary. In the presence of the patient on this occasion two of the photographs taken previously were colored. I regret that my opportunities for studying the case have been so meager. Such notes as I was able to make are as follows:

The patient is a man forty-five years of age, native of Germany, by occupation a varnisher in brass and iron works. His appearance is that of a well-developed, well-nourished person, and his manner indicates fair intelligence. He is of spare, sinewy build and of brownish complexion, with dark hair and eyes. He states that his mother died

* Read before the American Dermatological Association, May 31, 1894.

of "brain disease," and an aunt, it would seem, has some mild form of paranoia. In other respects the family history is good. The patient formerly drank rather freely, but has generally led a regular, hard-working life, is married, and has three healthy children. He gives no evidence of syphilis nor of arthritic disease, and his first and only serious ailment, he states, is the skin trouble with which he is now affected. The first sign of this was noticed fourteen years ago, in the region of the left ankle. The skin at this place seemed thinner and more sensitive, and the blue veins began to show prominently. There was also some scaling of the skin, and from time to time rather dry sores appeared over the bony prominences and were difficult to heal. Little by little similar changes began to appear higher up. A year or two later the same thing was noticed upon the right leg. These changes, it would seem, were neither preceded nor accompanied with any form of inflammation excepting such as attended the ulcers or sores, and these were of a very indolent character. Nor had there been any previous disease or injury to which the affection could be ascribed. It was apparently spontaneous and idiopathic. In course of time the hands and arms became similarly affected, but not, the patient thinks, till about five years ago. As the disease progressed and extended higher, it has been attended with occasional pain or discomfort, which thus far has affected only the lower extremities. The chief thing complained of has been a sense of great fatigue after work and long standing. This lasts, he says, for an hour or two after his work is over, and then disappears. So far it does not seem to have been sufficient to seriously interfere with or curtail his working hours, but chiefly because of the apprehension that it would come to this was he led to seek medical aid. Besides this feeling of fatigue, there have occasionally been sharp, shooting pains that would come in little shocks, especially at night, and often in the soles of the feet. There has been some itching in the vicinity of the ulcers that have developed from time to time about the ankles and anterior surfaces of the legs. No other abnormal sensations, such as a sense of constriction, tingling, numbness, "pins and needles," heat or coldness, have been complained of. It was noticed, however, that the affected surfaces were abnormally sensitive to touch, though not particularly to changes of temperature.

Status præsens.—When the patient is stripped a marked contrast is presented between the skin of the legs from the hips down, together with the lower two thirds of the arms, on the one hand and the surface of the rest of the body on the other, which latter everywhere appears perfectly normal. By comparison with the trunk the extremities ap-

pear thin, as if slightly shrunken; they are darker in color, show the courses of the veins more clearly, and are covered with multitudes of wrinkles diversified with smooth brownish or white interspaces that have a glazed appearance, resembling, but for the dusky color, a crumpled sheet of waxed paper or gold-beater's skin. (See colored plate.) The wrinkling for the most part follows the cleavage lines of the skin. It is most marked about the extensor aspects of the knees and wrists, especially the former. About the ankles and lower part of the legs the skin is a little scaly.

The extent of the disease on the lower extremities is about the same on either side. It begins below at a pretty sharply defined line, about an inch and a half above the soles at the side and back of the feet, and one inch back of the roots of the toes in front, whence the affection extends upward continuously, embracing the entire circumference and length of the legs; in front to a point within two or three inches of the flexure of the thigh; at the sides is bounded by a line that curves over the trochanter and behind reaches above the nates and half way up the surface of the sacrum. The cleft of the



FIG. 1.

nates, the perinaeum, and genitals remain unaffected. The line of definition above is not very clear, though there is a marked contrast between the normal white velvety skin above and the reddish purplish brown, wrinkled, dry, and parchmentlike surfaces below.

Upon the upper extremities the skin is affected from the base of the fingers (which latter are not affected) posteriorly and the palms anteriorly to an oblique line encircling the arm a little above the elbow. Its highest point, which on both sides is at the back of the arm, is near the junction of the lower and middle thirds, and is a trifle higher on the left side than on the right. Here, as on the lower extremities, while there is a sufficiently marked contrast between the atrophied and the sound skin, the line of definition is somewhat indistinct.

The Color.—This appears to be due to a blending of purple, red, and brown. (See colored plate.) Those elements of the skin upon which its opacity and consequent whiteness depend seem to have disappeared, permitting the blood-vessels underneath to show through. This is especially evident near the margins of the atrophied portions, where veins which are clearly perceptible in the latter are suddenly lost to view as they enter the area of normal skin. Besides the purple hue of the numerous veins there is a red reflex from the arterioles and capillaries. In some places there is a lilac coloring due to the combined effect of arteries and veins. Almost everywhere also there is a brownish discoloration which is made more evident when pressure is used so as to produce a temporary ischaemia of the part. In many places this brown pigmentation is seen to be punctate or in small lentigolike spots. It occurs over almost the entire atrophic area, and contributes a considerable quota to the general dusky discoloration. The color varies, however, with the patient's posture. Especially in the legs after the patient has been standing for a length of time the veins become turgid and greatly dilated, standing out as prominent tortuous ridges, and their deep purple color becomes everywhere predominant, giving the appearance of cyanosis.

In certain places, more especially over the legs and on the backs of the feet and hands, there are numerous whitish, scarlike patches where the atrophy has been more profound, and perhaps in some places corresponding to the sites of old ulcerations. (Fig. 1.) Even in many of these scarlike patches the punctate brown spots are distinctly present. Aside from these scarlike patches there are scattered over all the atrophic regions a multitude of small, slightly depressed spots which are apparent only on closer inspection, and which seem to imply that the degenerative process has not been absolutely uniform, but has been

more pronounced in certain places than others. Such shallow depressions are scattered abundantly over the thighs, buttocks, and arms.

Near the outer malleoli of both legs are shallow, indolent ulcers with sharp-cut adherent edges and gray base, devoid of granulations and showing a scanty serous secretion.

The wrinkling of the skin is apparent almost everywhere in the affected regions, though less marked on the legs than on the thighs and buttocks. In most places the wrinkles are extremely fine, looking at



FIG. 2.

a little distance like minute striæ. About the knees they are most pronounced. (See Fig. 2.) Here the thinned skin is thrown into numberless parallel transverse folds curving above and below the patellæ, leaving between them flat, smooth, glistening surfaces that look as if waxed or varnished. These flat, smooth surfaces are most marked over the patellæ. The wrinkling is well marked also over the nates, especially near the folds between the nates and thighs. The

lines curve gracefully from the outer aspect of the thigh around the nates toward the cleft. Just back of the toes the skin is thrown into fine wrinkles or striations that radiate outward from the atrophied portion, which here is whitish and scarlike with a lilac-colored border.

The hairy growth has almost entirely disappeared from the affected region, including the lanugo as well as the coarser hairs. Apparently the little dots of pigment scattered over the legs and arms mark the sites of degenerated hair follicles.

No sweating is apparent in the areas of atrophy. The patient states that his legs and arms are always dry, while the palms and soles sweat freely. While examining him, it was noticed that all around the borders of the feet, just without the atrophied portion, the skin was decidedly moist, while just above it was perfectly dry. To the touch the skin was like dry parchment. There seemed to be no change of temperature. It was neither below nor above the normal. Almost everywhere the skin was freely movable over the subjacent structures. On the legs, however, it was less so than elsewhere, and in places here was adherent. Elsewhere it could be readily pinched up, always in very thin folds, however, which on being released returned again to the niveau, though a little more slowly than in the normal skin.

The sense of touch over the affected region is very little if any diminished, but the skin is distinctly hyperæsthetic. The patient shrinks away from the points of the æsthesiometer much more when the latter touch the atrophied skin than when the sound skin is touched, due evidently to loss or thinning of the protective layers of the epidermis.

So far as could be ascertained, the organic muscles of the extremities were not noticeably atrophic. The patient was not aware of any weakness of the limbs, and the muscles were firm and hard to the touch. The abnormal sense of fatigue, however, of which the patient complained, would imply that they were not entirely unaffected. The thinner appearance of the legs is doubtless, chiefly at least, attributable to the loss of subcutaneous fat. The muscular strength of the limbs seems little if any impaired, and apparently there is perfect co-ordination as well as normal tendon reflexes.

The above, though evidently a case of idiopathic atrophy of the skin, differs very materially from all the common forms of macular, striate, or diffuse atrophia cutis propria. The latter, as a rule, are simply of the quantitative type, and resemble merely superficial cicatrices. Still less does this case resemble the stationary form of the xeroderma of Kaposi. Nor does it correspond to the symptomatic atrophies, such, for example, as succeed scleroderma and morphea. Not only is there

the history in such cases of a precedent condition of infiltration or induration, with more or less stiffness of the skin, but rarely even in the atrophied stage is the affected area devoid of a certain degree of condensation and immobility. Nevertheless, in their ultimate state they may come to resemble the case which I have described above, and such cases have occasionally been reported as cases of idiopathic atrophy. In this category should, in all probability, be classed the "general idiopathic cutaneous atrophy" of Wilson, as well as the cases of Schwimmer* and Glax,† though these latter are both improperly referred to the xeroderma of Kaposi, that of Schwimmer being also denominated "atrophia cutis universalis."

A case reported by Judassohn before the German Dermatological Society in September, 1891,‡ under the name of *atrophia maculosa cutis*, bore a certain resemblance in some of its features to the one just described. The lesions were symmetrical, and in some of the affected places the skin had the same dusky-red color and translucency, and was inelastic, wrinkled, and loosely adherent, but the atrophied spots were preceded by an eruption of papular elevations, that remained circumscribed and discrete, varying in size from that of a lentil to that of a silver mark piece. On account of the looseness and inelasticity of the skin, together with the preceding papulo-erythematous condition, he proposed the name *anetodermia erythematodes*. In a similar case presented by Beer* at the Vienna Dermatological Society in February, 1892, the lesions were preceded by pronounced œdema. In both of these cases the atrophy affected chiefly the connective tissue, and more particularly the elastic fibers.

The clinical type to which my case most clearly corresponds was first described by Buchwald,|| and so peculiar is the type and well differentiated is it by this writer that it might well be known as *Buchwald's atrophy*. In his case the affection occurred in a man thirty-six years of age, and had existed for sixteen years. It began at both knees and extended at first both upward and downward, later the extension being only upward, but upon the legs below the knees indolent ulcers often formed. The greatest extent was reached in one year from the inception of the disease, though within the affected areas the degeneration continued to increase. There were no prodromal symptoms, and

* *Die neuropathische Dermatosen*, Wien, 1883, p. 189.

† *Viertelj. f. Derm. u. Syph.*, 1875, p. 114.

‡ *Monatshft. f. p. Derm.*, 1892, p. 621.

* *Arch. f. Derm. u. Syph.*, 1892, p. 835.

|| Ein Fall von diffuser idiopathischer Haut-Atrophie. *Viertelj. f. Derm. u. Syph.*, 1883, p. 543.

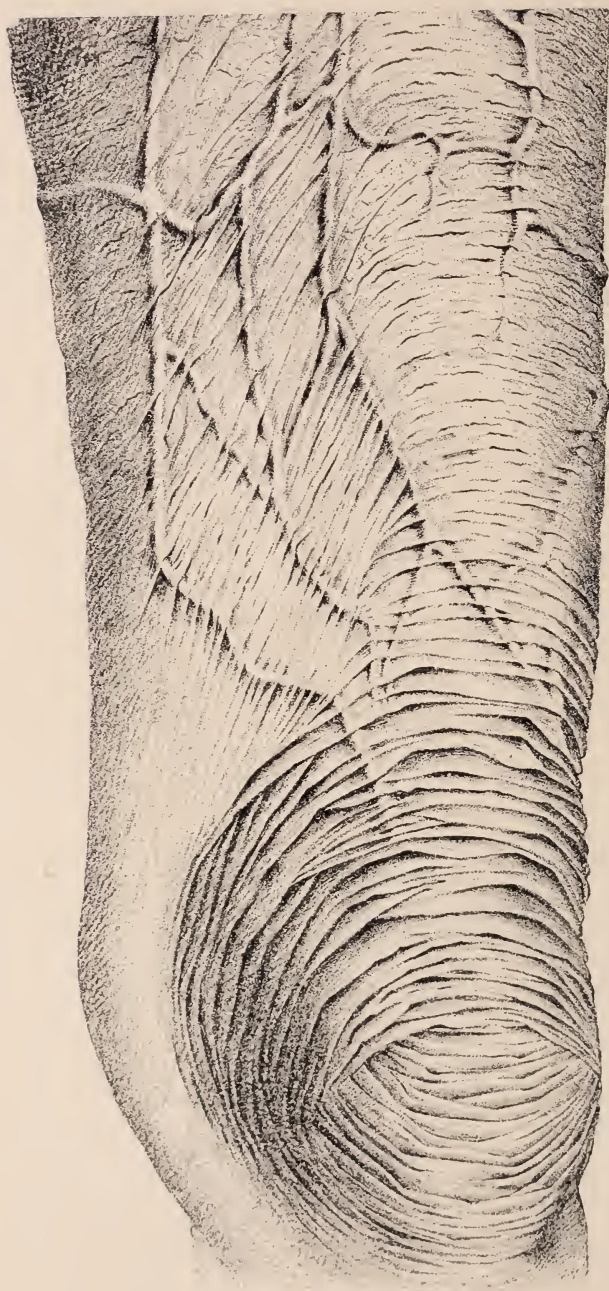


FIG. 3.—Buchwald's Case.

the ætiology of the case was as obscure as that of mine. The entire surface of both knees and thighs was involved, reaching in front to within five centimetres of the inguinal fold, and behind extending up over the nates, much as in my own case. (Fig. 3.) The limits of the disease above were rather abrupt, the division between the normal, well-nourished, and fat skin above, and the somewhat sunken, darker-colored areas of atrophied skin below being marked by a pretty distinct ridge. The affected skin was freely movable over the subjacent structures, was nowhere bound down, rigid, nor œdematous. It could be raised in large folds which, when released, disappeared rather slowly or remained stationary until some movement caused them to disappear. Almost everywhere were multitudes of coarse or fine wrinkles. They were most marked about the knees, where they encircled the patellæ, partly arranged in semicircles, partly in elliptical forms. On standing the wrinkling became more striking. Similar but finer wrinkles occurred, as in my case, over the nates. While in a recumbent posture the color of the skin was brown from pigmentation, but on standing the veins rapidly filled and became distended, and the color of the surface became cyanotic. There was no perceptible difference in temperature from the normal. The hairs had mostly disappeared from the affected areas. That the sweat glands were involved was shown not only by the customary dryness of the affected skin, but by the fact that when pilocarpine was injected hypodermically in a sufficient dose to cause copious diaphoresis the atrophied portions of the skin remained as dry as before. Sensation was not impaired. A microscopic examination of an excised bit of the diseased integument showed that the adipose layer had entirely disappeared. There was a general atrophy of all the elements of the skin, the sweat glands were largely diminished, there was marked atrophy of the hair follicles, and the papillæ of the skin had disappeared. The connective tissue underneath the epithelial layer appeared swollen and infiltrated with cell nuclei. The nerves and blood-vessels were unchanged.

Idiopathic cutaneous atrophy of the extremities, such as in this case of Buchwald's, to which my case so closely corresponds, is undoubtedly rare. Several other cases, however, have been reported which are so nearly alike in their general characters as to warrant us in regarding Buchwald's atrophy as a peculiar variety of disease. Two cases that are apparently of this variety have been reported by Pospolow,* though in these the symmetry was less pronounced and the laxity of the skin (judging from a photograph that accompanies one of the cases)

* *Annales de Derm. et de la Syph.*, 1886, p. 505.

was somewhat greater than either in Buchwald's case or in my own. The photograph shows dependent folds of skin resembling dermatolysis. Also in Pospolow's cases the sweat glands were unaffected; but in the main the features corresponded to those of Buchwald's atrophy.

Touton* and Kristian Groen† have reported cases that are more typical. In Touton's case both upper and lower extremities were affected symmetrically. Groen's case, in the location and extent of the atrophy, corresponded almost precisely to my own case. The patient was a sailor, forty-seven years of age, who entered the hospital for atonic ulceration of the leg, and had apparently paid little attention to the atrophic condition, and of this no history was obtainable.

TWO CASES OF EPIDERMOLYSIS BULLOSA.

By GEORGE T. ELLIOT, M. D.

New York City.

ATTENTION was first called in 1882 by Goldscheider‡ to the rare cutaneous affection of which two cases are reported in this article. He described it as an hereditary predisposition to bullous eruptions, having observed its occurrence in a patient whose father and grandmother on his father's side and her two brothers had been similarly affected. The patient had also a brother and sister who suffered from the same trouble, and also two nieces, children of his sister. Valentin,* in 1885, reported the second case, and found that the process had occurred in eleven persons in four generations of the same family. Köbner,|| in 1886, recorded the third case, in which the heredity was traced back only one generation to the boy's mother, and he gave to the affection the name still attached to it of "epidermolysis bullosa hereditaria." Other examples of the condition have since been placed on record by Legg, Max Joseph and others, the latter's case being a primary one in the sense that she was the first member of her family to show its evidences. Three children to whom she gave birth, and who suffered from the process

* *Deutsche med. Wochens.*, 1886, p. 6.

† *Norsk Magazine*. Referred to in the *Lancet*, Nov. 28, 1891, p. 1233.

‡ Goldscheider, *Monatsh. f. prak. Dermat.*, 1882.

* Valentin, *Berlin. klin. Wchsft.*, 1885.

|| Köbner, *ibid.*, 1886.

from early infancy, testified, however, to the hereditary tendency of the affection.

The two cases which I report here correspond in every particular to those already recorded, and may serve to increase the small number of similar examples to be found in dermatological literature. They are, besides, the only ones so far recorded in this country, and one of them (Case II) gave no hereditary origin for its existence.

Case I. Male, aged thirty, born in this country of German parentage, was seen by me in August, 1892. He was well developed physically and in good functional health. He gave no history of any antecedent diseases beyond the ordinary ones of childhood and slight temporary indispositions. He stated, however, that his father had been affected in a similar way as himself, the cutaneous trouble having developed during our civil war, and apparently in consequence of long and severe marching. The father's trouble was limited to the feet and developed especially in summer after walking, or after pressure or rubbing. The patient was born some years after the existence of the process in the parent, and its primary development was observed when he was five years of age. The manifestations of the affection were not, however, in him limited to the feet, but appeared also on the hands. They were noticed especially in summer, but also occurred at all seasons of the year. The bullous elevations arose without precedent redness, after pressure or rubbing of the hands and feet, after walking or rowing, or after using some instrument or other, a hammer, screw-driver, etc., but not under other circumstances. The patient complained also that in summer he suffered much from hyperidrosis of the hands and feet, and that a bromidrosis of the latter often developed, even the contents of the bullæ being offensive. No subjective symptoms were mentioned, except pain after the bullæ had ruptured and left a raw surface.

When the patient came under observation, there were numerous bullæ of all sizes on the hands and feet, some of which had arisen on the latter during his walk to the consultation. The lesions were prominent, distended, not surrounded by any zone of redness, and were resistant and difficult of rupture. He remained under observation for two months, during which time a succession of bullæ developed whenever in any way the hands and feet were subjected to pressure or rubbing, and all treatment made use of was of no avail in removing the inherent proclivities of the tissues to the formation of the lesions.

Case II. Male, aged twenty-one, born in Germany, was seen by me in June, 1893. His physical development and general and func-

tional health were good in every way. His cutaneous trouble had existed ever since he could remember, and, though he has ten brothers and sisters, neither any of them, nor his parents, nor any of his immediate relations are similarly affected. The lesions developed especially in summer, and appeared on any portion of the body subjected to rubbing or pressure. Bullæ developed upon the hands or feet, around the waist from the rubbing of his suspenders, or upon any surface rubbed for some minutes. He was an instrument-maker by trade, and he was intensely interfered with in his work by the bullous lesions which constantly developed upon his hands whenever he attempted to do anything. They arose without precedent redness or subjective symptoms, and caused pain only after having been ruptured. At the time he consulted me, there were numerous bullæ on his hands and feet, on both the palms and soles and dorsi, and also on his shoulders, around his waist, and here and there where pressure had been applied. The bullæ varied in size from a large pea to a nut; they were tense, and filled with clear serum, and ruptured with difficulty. After they had been broken, the raw surface healed rapidly without pigmentation or other change. Excessive general hyperidrosis was also complained of. The patient remained under observation for several months, and the development of numerous new bullæ was noted at each visit, but no form of treatment devised, either externally or internally, appeared to exert the slightest influence in controlling the condition. He was *in statu quo ante* when last seen.

These two cases may be said to present clinically the features and symptoms characterizing the process of epidermolysis bullosa, but in the one the hereditary influence was traceable, while in the other it was not. We can not, however, exclude the latter or second case from the same category, inasmuch as it agrees with Joseph's case, which was also a primary one, and, besides, for a disease to be hereditary even, there must be and must have been some starting point, some individual who primarily developed it and transmitted it to his descendants. We can not suppose that the tendency must have always existed through an infinite series of the past generations of the ancestors of an affected person, and we are justified in supposing that an individual himself, just as well as some remote progenitor, may originate the predisposition to the condition and then transmit it to his posterity. The patient in question was unmarried and had as yet no children—so, in consequence, no proof of its tendency to become hereditary could be obtained from that source; but nevertheless the clinical picture and course of the affection in Case II were sufficiently characteristic to allow its being regarded as one of epidermolysis bul-

losa similar to Case I, which was hereditary in origin. In this latter there are some features of peculiar interest in Case I to be mentioned. These were the age at which the process developed in the father, the circumstances under which it originated, and its limited and localized character.

Instead of beginning in early childhood, as did all other cases, we find that the tendency to the development of the bullæ only arose after the arduous marching entailed by war service upon the father, he having been previously free from any such symptoms. The disposition once started remained limited to the feet—that is, to the portions of the body primarily affected; but in the son we find that an extension to the hands had occurred, and upon these pressure or rubbing produced the immediate formation of bullæ. This curious feature in the case I will not attempt to speculate upon, inasmuch as we know so little concerning the real influences and factors controlling heredity, but it certainly is important enough for attention to be specially directed to it. Another observation made in the case is also of interest, and that is the hyperidrosis of those surfaces affected in the son. In Case II we find also that hyperidrosis was a prominent feature. In this patient, the sweating was general, not local, and the bullous formations likewise occurred on any part of the body so affected, so that a connection between the hyperidrosis and the cutaneous changes was certainly strongly suggested, especially when we remember that in all cases reported excessive sweating has been mentioned as a marked feature, and that the severest symptoms occurred during the summer, when the tendency to hyperidrosis was naturally increased.

At one of the consultations of Case II a bulla as large as a buck-shot, tense, and filled with clear serum, was excised from the inner surface of the left ankle. It had developed during his walk to the clinic, and could not have been present more than one hour before excision. The bulla was fixed in Fleming's solution and hardened in alcohol, then soaked in celloidin and mounted. The sections were stained with hæmatoxylin, borax-carmin, safranin, and the methylene blue neutral orcein method of Unna.

The external envelope of the bulla was found to be composed of the stratum corneum and a large portion of the stratum epitheliale of the epidermis, while at the base portions of the latter were found adherent and forming a more or less continuous or broken layer. Toward the lateral margins of the cavity there could distinctly be seen epithelial columns forming septa, which extended from the outer wall to the base. The contents of the bulla were granular, with fibrin fibers

and shreds distributed through it, but yet no leucocytes or cellular forms whatever.

When the sections were magnified with higher powers, the stratum corneum was found to be unchanged. That portion of the stratum



FIG. 1.—Vertical section through a bulla, showing the degenerated portion of rete forming outer wall and masses of rete cells remaining attached to the papillae. Here and there in the cutis masses of cells around the blood-vessels.

epitheliale, which formed the external envelope of the bulla, was composed of cells granular in aspect, with nuclei staining only slightly or

not at all, and its lower edge was fringed with spaces much larger than normal cells, having a granular appearance and no nuclei (Fig. 1). The nuclei in the entire stratum had the aspect of being soaked in the serous exudation and bereft of their staining characteristics. The epithelial masses forming the septa were degenerated in the same way, though here and there a few nuclei were seen which stained darkly. The same features were observed in connection with the epi-

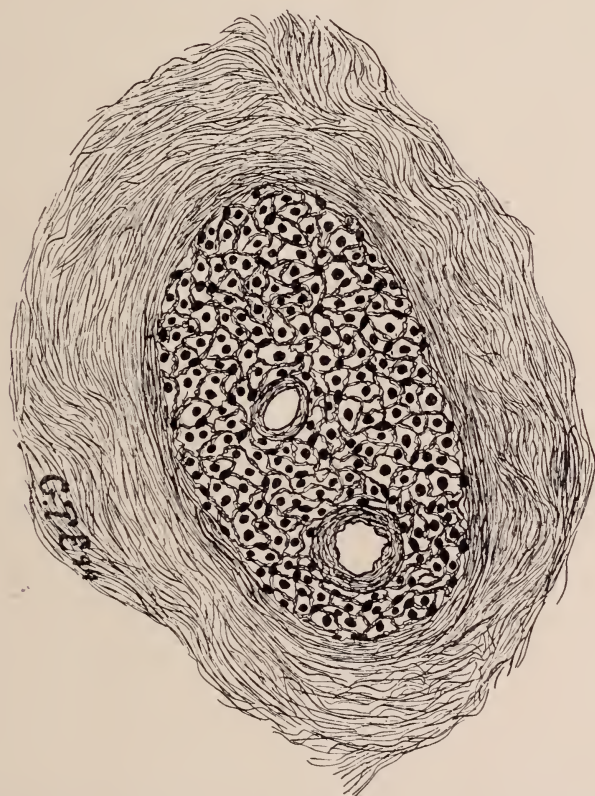


FIG. 2.—Cross section through an artery and vein in the subpapillary portion of the cutis, showing infiltration in oedematous tissue meshes.

thelial remnants situated at the base of the bullous cavity and seated upon the corium.

For some distance beyond the peripheral edges of the bulla itself, the rete presented a very peculiar appearance. It was in no part detached from the papillæ, nor was any portion of itself so separated as to form a cavity—it was intact—but the cells composing its lower third were elongated, their protoplasm granular, the nuclei linear, the

whole giving the appearance of the cells being drawn out longitudinally and compressed laterally. The nuclei of the lowest portions here of the cells of the rete stained deeply, but those in the upper two thirds were either faintly stained or not at all. Karyokinetic figures were not observed in the rete cells. The papillary portion of the corium forming the base of the bullous cavity was either bare, the papillæ jutting into the space nakedly, or, as mentioned, they were covered with a portion of the stratum epitheliale. They were swollen and œdematous, their blood-vessels greatly dilated, but unsurrounded by any cellular elements. In the subpapillary plexus, the dilatation of the blood-vessels was also seen, but around them considerable cellular infiltration occurred. (Fig. 2.) The perivascular tissue was œdematous, and in its meshes the leucocytes were congregated. An increase in the connective-tissue cells was also noted. This perivascular infiltration occurred particularly about the subpapillary plexus, but yet it also extended downwards along the ascending branches of the arterioles almost to the subcutaneous plexus of vessels. There were not, however, any evidences of diffuse cellular infiltration, but this latter was localized around the blood-vessels alone. The lymph spaces of the cutis were likewise dilated, and the whole upper half of the corium was so drenched by the exudation that even the infiltration and fixed cells were stained poorly and with difficulty. The appendages of the skin were normal to all appearances, except the coiled glands. These were, in the region of the coils, surrounded by some cellular infiltration, and the coils themselves were considerably disorganized. The regular arrangement of their cubical epithelium was not found, but the lumina of the coils were filled with nuclei staining faintly or well, and apparently imbedded in granular masses. They were not, however, dilated.

The microscopic examination of the lesion from this case of epidermolysis bullosa thus shows the process to be characterized by a very marked dilatation of the papillary and subpapillary vessels, a soaking of the corium by an excessive serous transudation, and an infiltration of cellular elements about the blood-vessels last mentioned, as well as the ascending branches of the vascular tree. The fluid pouring out so abundantly drenched the upper half of the corium and naturally invaded the rete and led to the cellular changes and the formation of the bulla. It is in view of the deep situation of this lesion in the rete and the absence of the trabecular formations usually occurring in similar lesions, originating slowly and from the amount of inflammatory exudation ordinarily taking place that I would judge that the fluid exudation was sudden and excessive. These epithelial trabeculæ did occur, it is true, at the periphery of the bullous cavity; but in the presence

of the conditions mentioned as existing in the rete beyond the margins of the bulla, it would appear to me that they were only the result of a lateral extension of the original primary bulla, and developed after the acute and excessive amount of transudation had occurred. The splitting off of the rete so deeply in the stratum spinosum does not appear to me to be of any such major consequence as other observers have regarded it, but it seems to me to be determined by the amount of exudation taking place, and also and especially by the macerated condition of the epidermis as a whole, which could result from the hyperidrosis signalized as an important feature in all the cases which have been reported.

The inflammatory infiltration present in the cutis about the blood-vessels is certainly of importance, owing to the fact that such symptoms are not mentioned by others, and it seems to me that they constitute the real pathological features of the process—that is, the finding, in so recent a lesion as was excised in this case, of such extensive perivascular inflammatory infiltration would lead me to regard the process as fundamentally an inflammatory one, in which the bullous formation is simply a consequence of the sudden and excessive serous exudation in an individual with an acquired or hereditarily exaggerated irritability of the cutaneous vascular system. That the objective lesion in these cases is only a result of a mechanical tearing away of the rete by the sudden rush of fluid would seem to me to be apparent from the presence of the changes in the cutis and the absence of any cellular elements in the contents of recent bullæ, or of mitoses in the rete. Most certainly the conditions in the corium were too distinct and marked to allow the single conclusion to be made that the process was alone due to predisposition to a facile solution in continuity of the stratum spinosum, resulting from an exudative condition (Köbner, Goldscheider, etc.). Valentin alone regarded his case as a dermatitis bullosa, though, Unna, in his recent work on *Histopathology* of the Skin, regards the process also as a dermatitis, one traumatic in origin. I would unhesitatingly agree with that opinion, and from my pathological study would regard the affection as due in a predisposed individual to an excessive response on the part of the blood-vessels to an external irritation and the consequent pouring out of an enormous amount of serous exudation. The fluid penetrates rapidly into the rete, already somewhat softened and macerated by the hyperidrosis existing, and, tearing it away at its least strong portion, forms then the bulla. The serous exudation is, however, so sudden and rapid that it outstrips the cellular infiltration of the tissue, and, therefore, clinical symptoms of inflammation are wanting at the time the bulla

is formed, and its histological evidences are found only around the blood-vessels when a recent lesion is examined. The same conditions are clinically and histologically present in other diseases—pemphigus, impetigo contagiosa bullosa, etc.—characterized by excessive exudation, when very young and recent lesions are examined, without, however, they being regarded as simply due to facile solution in continuity of the stratum spinosum, or other portion of the rete, and I would, therefore, claim for “epidermolysis bullosa” a more complex pathological nature than has been ascribed to it, and regard it as a dermatitis—that is, as an inflammatory process originating in the cutis itself, and manifesting itself by the formation of bullæ after slight or severer traumatisms.

14 West Thirty-third Street.

PRELIMINARY REPORT ON THE STUDY OF THE GONOCOCCUS.

(From the Laboratory of the N. Y. Post-Graduate Medical School and Hospital.)

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THIS preliminary report of the study of the gonococcus is not offered because sufficient evidence of its relation to the gonorrhœal process has not been presented, but because from contact with members of the profession we find that many do not accept it as the ætiological factor, while willing to believe that other diseases, like tuberculosis, cholera, etc., are dependent upon a specific organism.

This is undoubtedly due to the fact that genito-urinary surgeons in this country have not brought this subject frequently enough to their attention. We wish also to present some new experiments in the culture of the gonococcus, which promise a better understanding of conditions necessary to its growth, and to offer suggestions in its therapy.

We will not occupy time in a *résumé* of the history of gonorrhœa, but will commence at the period of the discovery of the specific organism by Neisser¹ in 1879: Neisser claimed to have found it constantly present in all gonorrhœal discharges, and in all cases of gonorrhœal conjunctivitis. In 1880 Bokai and Finkelstein² not only

corroborated Neisser's observations, but asserted that they had been able to cultivate it, and to induce gonorrhœa in two cases by introduction of pure culture into the urethra. Haab³, 1881, found that the cocci in blennorrhœa neonatorum were absolutely identical with those found in specific urethritis. In 1882 Neisser⁴ published a detailed account of his organism.

According to Loeffler and Arning⁵, the experiments of Bockhart⁶, in 1883, are open to criticism, but they were corroborated by Marchiafava⁷, Eschbaum⁸, Newbury, Campona, and Keyser⁹.

Sternberg¹⁰, in the same year, denied the specific character of Neisser's organism, considering it identical with the micrococcus urea. In 1884 Zweifel demonstrated that only lochia which contained gonococci possessed the property of originating blennorrhœa in the newborn. Bumm¹¹ and Welander's¹² results were of a similar nature. Sternberg, again, in 1884¹⁰, opposed all of the foregoing results, on the ground that the cultures used by the various observers were impure. Following this paper of Sternberg, a number of articles were published, some for and others against the acceptance of the specific coccus.

Finally, Bumm¹³, in 1887, brought undeniable proof of the specific nature of the gonococcus of Neisser, and its constant relation to the gonorrhœal process. He was able to cultivate it upon human blood serum (placental blood), and produce gonorrhœa with the twentieth generation of a pure culture. Wertheim next succeeded in cultivating the organism upon blood-serum-agar and blood-serum-gelatin. His observations were verified by Gebhard. Broese¹⁴, Saenger, and Shanta accept the gonococcus as the ætiological factor, questioning only the possibility of diagnosing the disorder in all cases from microscopical examinations alone. Touton¹⁵, at the Eleventh International Medical Congress, adheres strongly to the evidence in favor of its specific nature, and gives a masterly description of the histological changes brought about by its presence in the tissues of the genito-urinary tract.

Quite recently Turro¹⁶, of Barcelona, reports having cultivated the gonococcus upon simple acid media (gelatin and peptone bouillon). He states that alkaline media are inappropriate for the cultivation of this organism, since its virulence is destroyed and its development restricted. The vitality of the coccus is preserved for a period of seventy-one days. Cultures grown in alkaline media are nonpathogenic for dogs, but acid-culture media produce cultures which generate an inflammatory condition of the urethra in these animals resembling the gonorrhœal process in man. The gonococci, however, do not lie within the interior of the pus cells contained in the artificially generated

discharge, and the latter likewise swarms with foreign bacteria. It does not liquefy acid gelatin, but will liquefy alkaline.

No matter how old the gonorrhœa may have been, cultivation experiments were always successful. He cites a case in which he was able to obtain a pure culture eleven years after the subsidence of gonorrhœal attack.

Finger¹⁷, in a very important communication, in August, recommends as a substitute for blood serum urine-agar (one part urine, two parts agar). "Cultures of gonococci do not grow in warm temperature. Development first begins at 25° C. ; 36° C. producing the optimum growth. Temperature above 40° C. arrests the growth, and if continued for a number of hours will kill it. The gonococcus is also very susceptible to drying; if the cultures are protected against evaporation, they retain their vitality from four to six weeks. The gonococcus is susceptible to the action of strongly alkaline media—i. e., their growth is restricted; acid media favor their development. Gonorrhœal pus remains virulent so long as it is not completely dried; hence the possibility of immediate transference of gonorrhœa by means of clothing soiled with gonorrhœal pus is to be admitted. The gonococcus is less susceptible to chemical agents than to heat: e. g., pure cultures treated with potassium permanganate, 1 to 1,000; carbolic acid, 1 to 1,000; bichloride of mercury, 1 to 5,000; and nitrate of silver, 1 to 1,000, allowed to work for a period of two minutes, grew when transferred to plate culture. Consequently, two minutes' action of the above-mentioned medicaments is insufficient for the destruction of these germs."

Bunn, Wertheim, Amfuso, Risso, Steinschnider have produced gonorrhœa by inoculation with pure cultures. Finger inoculated seven cases with pure cultures of the gonococcus, and in all of these the results of the inoculation were positive. After a period of from two to three days succeeding the inoculation a typical acute urethritis developed; the secretion showed by microscope and culture the presence of numerous gonococci.

Experiments were carried out on various species of animals, and in all cases with negative results, thus differing from the results observed by Turro. The cause of failure in these cases, Finger suggests, was due to the higher temperature of the mammalia: beef, 39.4° C. ; sheep, 40.3° C. ; guinea pig, 40° C. and over.

In eight cases inoculated with pure culture, where death was expected in a few days, five were negative and three positive. In the cases in which positive results were obtained only slight elevation of temperature was observed, but in the five cases yielding negative

results high fever was present. In one of the three positive cases, where three days elapsed between the inoculation and death, the anatomical picture of a pronounced gonorrhœal urethritis was found. This, Finger states, is the only case of acute gonorrhœal urethritis in which anatomical examinations have been made. The following is an abstract translation of his report :

“As regards the anatomical alterations, examinations showed the flat epithelium of the fossa-navicularis but slightly altered. It was covered with manifold laminæ of pus corpuscles, its structure being well preserved, and between the epithelial cells were wedged in numerous pus cells. The alterations in the epithelium of the remaining pars pendula were much more intense. The upper layers of the cylindrical cells were displaced, loosened, the cells in partial exfoliation, and between them large layers of pus cells. The polygonal transitional epithelium below the cylindrical cells was found infiltrated with numerous pus corpuscles. The subepithelial connective tissue below the flat epithelium of the fossa navicularis, as well as that under the cylindrical epithelium of the remaining pars pendula, was infiltrated with leucocytes. The upper layers of pus cells were closely packed together, and decreased in numbers toward the depth of the tissue. The blood-vessels of the subepithelial layer were dilated, and showed inflammatory leucocytosis. Most remarkable was the inflammatory process in the epithelium and in the connective tissue. This process was not of a uniform character, but varied in intensity in well-defined foci. So long as the epithelium remained intact the alteration in the epithelium and connective tissue was less, but, on the other hand, always increased in intensity at those parts where the surface was broken by a follicle. The periphery and neighborhood of the follicles always showed the most intense alteration, so that the process presented was a pronounced follicular and perifollicular one.

“All the sinuses of Morgagni were tightly filled with plugs of closely arranged pus corpuscles. The epithelium was loosened and the epithelial intercellular spaces crowded with pus cells. The infiltration of the perifollicular connective tissue with pus cells was especially intense.

“Alterations analogous to those in the epithelium of Morgagni's sinuses were also shown in the excretory ducts of Littre's glands. They were likewise filled with masses of pus cells, and the epithelium loosened and packed with pus corpuscles. The luminæ of Littre's glands themselves were plugged with leucocytes. In regard to the gonococci, they were numerous in the pus, lying on the surface of the mucosa. Here they were partially free, but chiefly included in the leucocytes, resembling a picture analogous to a smear preparation made from gon-

orrhœal pus. The relation of the gonorrhœal coccus to the epithelium varied according to the structure.

"In the squamous epithelium of the fossa navicularis the gonococcus was always superficial. Here it spread in the form of a slight layer on the superficial lamina of the squamous epithelium, but did not penetrate between the epithelial cells. The leucocytes wedged between the epithelial cells contained no gonococci, the cylindrical epithelium was infiltrated throughout its whole extent by gonococci, and the manner in which this occurs is very characteristic. The gonococcus never penetrates the epithelial cells, but always pushes itself between the epithelial spaces; pair after pair enter here, surround the contour of the epithelial cells with a single seam, and only where small space originates, by the arrangement of the epithelium, do they form characteristic sarcinalike clumps. The arrangement of the gonococci in this manner between the epithelium forms a reticulum, in the meshes of which the epithelial cells are situated. In all localities where the pus cells penetrated between the epithelial cells (which indeed was often the case) the gonococci were also present in the protoplasm of the pus cells in greater or less numbers.

"Likewise, the inflammatory phenomena in the epithelium about the follicles are most intense where the gonococci are most numerous. But the gonococci do not remain in the lower strata of the epithelium. In this case (in spite of the short period elapsing after infection) the gonococci were present in numerous points in the subepithelial connective tissue. They penetrate in small clumps between the connective-tissue bundles, lying only in the upper layers and extracellular.

"The gonococci were especially numerous in the lacunæ of Morgagni and in the excretory ducts of Littre's glands. Large numbers were found in the pus plugs within the lumen, partially free, partially inclosed in the leucocytes. They also penetrated the epithelium of the lacunæ and the excretory ducts in the same manner as upon the free surface, infiltrating it in its whole thickness and entering between the epithelial cells, as well as penetrating the leucocytes.

"In the pus plugs occluding the lumen of Littre's glands the gonococci are found partially free and partially in the body of the pus cells.

"*Conclusions.*—1. The relations of the gonococcus to the tissues of the gonorrhœally affected mucous membranes are variable, and essentially dependent upon the structure of the epithelium covering the mucosa.

"2. The gonococcus does not penetrate mucous membranes covered with squamous epithelium, fossa navicularis, para-urethral follicles

and oral mucous membranes. It grows only upon, or in, the superficial layers of the epithelium.

"3. On the other hand, the gonococcus rapidly penetrates the whole thickness of the epithelium of the mucous membranes provided with cylindrical epithelium—e. g., urethra, conjunctiva, and rectum—and enters the connective tissue a few days after infection.

"4. An analogous relation to the cylindrical epithelium is also manifested by the gonococcus in mucous membranes covered with a single layer of ciliated epithelium—e. g., the Fallopian tubes.

"5. In all localities where the structure of the epithelium permits a rapid penetration of the gonococcus into the deeper structures—e. g., cylindrical and ciliated epithelium—the gonococcus in the tissues penetrate even the leucocytes. Only in those localities where, on account of the presence of squamous epithelium, the location of the gonococcus is superficial, union of the gonococci with the leucocytes first takes place upon the surface.

"6. The gonococcus penetrates Morgagni's lacunæ, the excretory ducts, and the lumina of Littre's glands, as rapidly as but in greater number than the connective tissue." In both they occur free in groups as well as inclosed in leucocytes.

The writers investigations of the gonococcus began the 1st of July, and have covered a period of four months. Researches are still in progress, and the present paper is considered as a preliminary report of results thus far obtained.

We have examined, with very few exceptions, every case of urethral discharge applying for treatment at the New York Dispensary during the period above named, nearly five hundred in all. In many cases several examinations were made. Wherever there was sufficient discharge to obtain a specimen we found the gonococcus present, with the following exceptions:

1. Urethritis, with a doubtful period of incubation, in a boy sixteen years of age, the case healing without treatment or the appearance of any complications. In this case a short rod bacillus, which grew in acid media, was found in the pus and mucus shreds.

2. Cases of phimosis and balanitis, where the inflammation of the urethra was from extension, and ceased in a few days after the balanitis was cured.

3. Chancres and chancroids in the urethra.

4. Secondary syphilis.

We also found the gonococcus in the pus of the urine, in posterior urethritis and cystitis. In twelve cases of peri-urethral abscesses the gonococcus was found ten times. It was also found in

vaginitis in two children, one two years old, complicated with gonorrhœal rheumatism in right knee and wrist and in left ankle. In this case both of the parents had gonorrhœa. In the other case, that of a child four months old, occurring in the service of Prof. Chapin (in the Babies' Wards of the Post-Graduate Hospital), we could find the gonococcus in abundance, but were unable to trace the source of the infection.*

For demonstrating the gonococcus we used the following method of staining:

Taking two glass slides, we draw the edge of one across the meatus, then draw this across one end of the other slide and rub the two together, in this manner securing a thin smear and obtaining two specimens. After drying (either in the air or over flame), by means of a pipette, we cover the specimens with Loeffler's methylene-blue solution, which is prepared as follows:

Concentrated alcoholic solution of methylene blue... 30 c.c.

Solution of potassium hydrate, 1 to 10,000.....100 c.c. M.

Wash in plain water, dry with blotting paper and over flame, and examine with a one-twelfth oil immersion without cover-glass. Gram's method was used, when necessary, to confirm diagnosis. The size, morphological character and arrangement, and the daily examination for more than four months with the same microscope and power, enabled us to speak with certainty of the nature of the organisms found.

The morphological characters of the gonococci observed by us correspond with this description given by Finger:

"The gonococcus is a diplococcus. Each of the halves has an outer convex and an inner straight contour; both lie close to one another along the straight contour, so that only a thin slit remains between them. Each half of the diplococcus thus resembles a coffee bean. The gonococcus presents these characteristics in common with all diplococci. A further characteristic is furnished by the grouping. It is never grouped in chains, but is always found in small groups and clumps, and the number of single individuals in each group is not alone paired, but is usually divisible by four. . . .

"The groups are situated partly between the cells, partly (and this is characteristic of the gonococcus) in the pus and epithelial cells. Thus we find cells in which a single group or a few groups of gonococci are situated in the protoplasm, usually near the nucleus.

"In other cells the number of gonococci is larger; they extend on

* The child has since died, and a full microscopical examination of genitals is being made.

one side or the other to the edge of the cell, but never beyond it, thus proving their presence within, not upon, the body.

“Finally, other cells are so full of gonococci that they conceal the nucleus. When this takes place the cell bursts, and the group of cocci escape from the cells.

“We then find not infrequently that groups of cocci are arranged between one, two, or three cell nuclei, but without the sharp contour of the cell body. They are generally aggregated closely toward the middle, and loosely toward the periphery.”

As far as our culture experiments go we have been able to grow from gonorrhœal secretions in various acid media an organism which possesses all the morphological characters of the gonococcus. As our experiments are still in progress, we have thought it best to wait until they are completed before publishing in detail the methods employed and results obtained.

Conclusions.—1. Evidence of the ætiological relation of the gonococcus to the gonorrhœal process.

2. The luxuriant growth of the gonococcus in acid media, its feeble or suspended growth in alkaline media. (This offers suggestions in therapy, and experiments are being carried out for the purpose of obtaining light upon this point.)

3. Influence of temperature upon their development (growth being suspended at temperature of 104° F.). Another suggestion in treatment.

4. The liability of infection from clothing, wash, etc. (One case contracted in this manner has come to our notice.)

5. The constant presence of the gonococci in urethral discharges, and ten out of twelve abscesses of gonorrhœal origin.

6. These experiments tend to prove that our methods, which have given clinically the most satisfactory results, have had a scientific basis.

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Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

236TH REGULAR MEETING, HELD ON TUESDAY EVENING, SEPTEMBER 25, 1894.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Lupus Erythematosus.—Presented by DR. GEORGE T. ELLIOT.

The patient was a male, a mulatto, aged thirty-one years. The disease had existed over two years, and consists of discrete patches on the left cheek, the ears, over the right eyebrow, and behind the right ear. The patches began as small, papular elevations, which enlarged in an eccentric manner, leaving markedly atrophic surfaces, bounded by narrow pigmented borders, which were scarcely if at all elevated.

A Case of Lupus Vulgaris.—Presented by DR. ELLIOT.

The patient was a male, aged thirty-seven years; English. He stated that the disease began fourteen years ago, and, notwithstanding constant treatment received in England, it has progressed so as to involve a large portion of the cheek and neck. The patch is about four inches square, uniform in character, and presents the usual symptoms of lupus vulgaris. Dr. Elliot said he presented the case principally to show the marked beneficial effects derived from the use of the oil of cinnamon. The lesion had been thoroughly scraped early in July, 1894, and the surface had healed over. On September 5th the patch was tumefied, inflamed and red, and extending along the edges.

The patient was then given the oil of cinnamon, and instructed to rub it into the lesion twice daily. The effect was immediate; the tumefaction subsided, the redness disappeared, and no further extension has taken place. The improvement in the appearance of the lesion is very marked. The discrete minute tubercles in the cicatrix have also become very distinct, so that they can be easily picked out with the micro-paquelin.

DR. SAMUEL SHERWELL expressed the opinion that in the treatment of lupus no particular method can be followed in all cases; each case must be handled in a different way. In one very obstinate case he has had excellent results from the use of the acid nitrate of mercury.

DR. H. G. PIFFARD said that probably ninety-five per cent of the so-called oil of cinnamon kept in the drug shops is really oil of cassia; the true oil of cinnamon is much more expensive. The preparation coming from Ceylon is the best.

DR. GEORGE H. FOX asked Dr. Elliot whether he had tried any of the other essential oils in this case.

DR. ELLIOT replied that he had tried the oil of cloves, but without effect.

DR. S. LUSTGARTEN said that, having seen the case but once, it was difficult to judge as to the amount of improvement that had occurred. He regarded the lesion as being far from cured, and referred to the amount of fibrous infiltration that existed.

DR. JACKSON said he had employed oil of cinnamon in some cases of alopecia areata and ringworm with no effect whatever.

DR. ELLIOT, in closing the discussion, said he had not presented the case as one cured by the oil. He simply wished to show the effect of the treatment, and the marked improvement that had occurred in the amount of tumefaction, inflammation, and pain.

A Case of Generalized Scleroderma.—Presented by DR. E. B. BRONSON.

The patient was a man, aged forty, who had been under the speaker's observation for the past six months, although he had the disease for at least fifteen months previous to that. It began with a certain amount of stiffness and numbness of the fingers, and gradually extended. Before treatment was commenced the tissues were very rigid, and the face resembled that of a frozen cadaver. The treatment consists of tonics, iron, strychnia, and potassium iodide, and local massage. Under this the man has improved very much, although the fingers are still quite stiff. The skin is markedly bronzed, which would indicate some disturbance in hæmatosis, perhaps similar in nature to that seen in Addison's disease.

DR. PIFFARD said he did not think that the case shown by Dr. Bronson is entitled to the name scleroderma. He considered it rather an affection which he has classed under the name of acute sclerosis, which usually gets well under tonic treatment; scleroderma, on the other hand, is much more obstinate.

DR. LUSTGARTEN referred to one case of generalized scleroderma coming under his observation which was cured by the use of thyroid extract. Scleroderma diffusum, to his idea, is an entirely different disease from scleroderma *en plaques*. In a case of the latter class the thyroid treatment was a failure.

DR. BRONSON said he thought his case was entitled to the name of generalized scleroderma. The condition had existed for over a year, and, while there has been some improvement under treatment, it has been extremely slow.

Clinically, the case was different from those known as circumscribed scleroderma. Dr. Bronson said he was unable to throw any light on the ætiology of the disease in this case. The man gives a history of having had rheumatism.

A Case of Pemphigus Vulgaris, associated with Extensive Leucoderma.
—Presented by DR. ELLIOT.

The patient was a male, aged fifty-four; German. The disease first appeared one year ago on the dorsum of the feet and toes, and spread rapidly until the entire body and scalp were involved. The lesions consisted of bullæ of various size, which burst or dried up, forming crusts covering a moist, raw base. The individual lesions showed no tendency to spread. At the time of the first eruption the feet were swollen, and during its course the nails were shed. At the end of three months the lesions had subsided considerably, but there has been a steady outcropping of bullæ of varying sizes, from that of a pea to an egg. The man's general health has suffered, and he is anæmic and weak. A curious feature of the case is the extensive pigmentation of the trunk and extremities, which presents the characteristics seen in leucoderma. The sites of the bullæ are not pigmented, but the skin intervening between them is, and the body presents a peculiar checkered appearance. Since August 7, 1894, the man has been treated with arsenic; he has, however, received none during the past two weeks.

DR. JACKSON stated that pemphigus seems to be on the increase; he has during the past six months seen four cases.

DR. LUSTGARTEN said he agreed with the diagnosis. In some respects the case resembled one of leucoderma syphiliticum.

DR. BRONSON expressed the opinion that a distinction should be made between the terms leucoderma and vitiligo; in the former condition there is a paling of the skin over certain areas, while in the latter there is excessive pigmentation. In the case presented by Dr. Elliot the increased pigmentation may be the result of the arsenic treatment, notwithstanding the fact that arsenic usually affects the sites previously diseased. In this patient the appearance of the spots devoid of pigment is not very different from what the normal skin would be.

DR. FOX said he has seen cases in which the arsenic treatment was followed by a perfectly smooth, brownish pigmentation of the skin. In one case the brown surface of the abdomen was dotted with minute white spots, which might have been called small patches of leucoderma, occurring as the direct result of the arsenic treatment.

DR. LUSTGARTEN said vitiligo is a disease in which the loss of pigment extends peripherally, while leucoderma covers those cases in which there is no such extension, and in which the loss of pigment occurs on the sites of previous lesions. In Dr. Elliot's case the leucodermatous patches occurred on the sites of previous pemphigus bullæ.

DR. PIFFARD agreed with the statement made by Dr. Fox that the majority of writers on this subject use the terms vitiligo and leucoderma indiscriminately. He thought a distinction should be made between the two conditions.

DR. KLOTZ said it seemed remarkable that the pemphigus bullæ in this case should leave white spots, while in his experience, at least, they usually leave darker pigmentation.

DR. ELLIOT said that, as far as the history goes, this patient received no

arsenic until he entered the hospital on August 7, 1894. During the past two weeks the arsenic treatment was discontinued. In the case mentioned by Dr. Fox, in which there were white spots on the abdomen, they were probably the result of the treatment and not true leucoderma. The speaker thought it was scarcely worth while to make any distinction between vitiligo and leucoderma. We may have a patch which spreads peripherally, and we call it vitiligo. When that patch has reached its full development, and no longer enlarges, we call it leucoderma. True leucoderma is probably due to a lesion of the sympathetic nervous system, and there is always a marked contrast between the pigmented and nonpigmented skin.

DR. FOX said that in the case referred to by him the pigmentation was the result of prolonged treatment of psoriasis with arsenic. The pigmentation on the abdomen was perfectly uniform, but covered with white spots, which did not appear to have any connection with the previous psoriatic eruption. They seemed to be due to the arsenic.

An Atypical Case of Lichen Planus.—Presented by DR. KLOTZ.

The patient was a man aged fifty, born in Austria, a tailor, with no history of syphilis or other skin disease. He noticed since last July an eruption on the penis and scrotum, later on the dorsal aspect of the lower leg and foot, also on the soles, which caused considerable itching.

On penis and scrotum several circular and oval patches about one inch in diameter were present, showing only slightly darker pigmentation in the center, surrounded, by a more or less sharply defined infiltrated border. On the penis this border formed a perfectly smooth, white, hard ridge, while on the scrotum it was broader, less prominent, dark red, and covered with thin, white, adherent scales. On the feet and legs the patches were irregularly shaped, not larger than half an inch in diameter, quite hard, of a bluish color. When first seen, they were covered with a continuous, dry and hard, firmly adherent, brown, horny scale, slightly depressed in the center. Since then this horny cover had become detached from most of the lesions, leaving an irregular surface, with depressed center, partly covered with fine whitish adherent scales; some places presented almost a warty appearance. The patches had undoubtedly extended in the periphery. On the soles the infiltration beneath the horny scale was insignificant.

DR. R. W. TAYLOR said that while he had not had the opportunity to examine the case thoroughly, the distribution of the eruption and its clinical features resembled the superficial flat scaly papules seen in syphilis. The infiltration of the skin which is usually so marked in lichen planus was lacking.

DR. ELLIOT said that the lesions on the scrotum and the soles of the feet represented to him the flat, papular syphilide. He did not regard the case as one of lichen planus, but one of syphilis.

DR. JACKSON expressed the opinion that the lesions resembled those of syphilis rather than lichen planus.

DR. C. W. CUTLER also diagnosed the case as one of syphilis.

DR. A. R. ROBINSON said that from the appearance of the lesions on the ankle he would make the diagnosis of lichen planus.

DR. LUSTGARTEN said he regarded the case as one of lichen planus, and not very unusual in its features.

DR. KLOTZ said that he had omitted to mention that since he had first

seen the case an acute dermatitis had occurred on the scrotum, which had changed the appearance, particularly the color of the patches.

DR. C. W. ALLEN expressed the opinion that the case was one of lichen planus. He recently saw a very similar case, which had been for a long time treated as a case of syphilis. Specific remedies had no effect on the lesions, which proved to be lichen planus.

DR. FOX said he would base the diagnosis of lichen planus on the location of the eruption—namely, the penis and scrotum, and the anterior surfaces of the tibia and forearm. Not all cases of lichen planus have the violaceous color, or show the characteristic contour of the lesions.

DR. SAMUEL ALEXANDER said he did not regard the case as one of syphilis.

DR. KLOTZ stated that the absence of infiltration in the center of the patches on the penis and scrotum spoke against syphilis. The patches on the feet and legs were covered with a hard, dark-brown scale, the like of which he had never observed in syphilis. The slight enlargement of the inguinal glands he did not consider pathognomonic of syphilis, as it was found quite frequently in men, particularly in those belonging to the working classes as a result from various causes other than syphilis.

A Case of Lupus Erythematosus.—Presented by DR. CUTLER.

The patient is a young man, aged twenty-two. About one year ago a red patch the size of a three-cent piece made its appearance on the tip of the nose. It was at first covered with small scales, which he picked off. The lesion has gradually extended, and now covers about one third of the nose. At times the lesion becomes red and inflamed; when this subsides, it resembles a simple seborrhœa, except that the scales are more adherent. The lesion has failed to respond to ordinary treatment.

DR. SHERWELL said he regarded the case as one of seborrhœa congestiva, which very closely resembles lupus erythematosus; indeed, it is hard to tell where one leaves off and the other commences.

DR. ELLIOT said he agreed with Dr. Cutler's diagnosis.

A Case of Lupus Erythematosus.—Presented by DR. ROBINSON.

The patient was a woman, aged thirty-five. She was first seen on September 4, 1894. The only history that could be obtained was that she went in bathing two years ago, and when she came out she noticed that her face was red. This has troubled her ever since, being better at times, but lately it has been growing worse very rapidly. There is an eruption covering the face and extending back to the ears; very little is present on the forehead. The eruption is dark red in color, and the patches are slightly elevated and firm to the touch. Here and there are patches of atrophied tissue of recent date. On each side of the face there are about fifteen to twenty crusts about the size of a ten-cent piece, with ulceration beneath. There were a number of scales, which were easily removed without pain, and on none of them were there any sebaceous plugs, nor were there any dilated orifices. On the neck there were a large number of small papules, dark red in color, isolated, sharply limited, rather superficial, but fairly firm. A diagnosis of syphilis was first made, and the patient was given mercurial ointment and iodide of potassium, fifteen grains three times a day. Afterward a diagnosis of lupus erythematosus was made. Dr. Robinson said the case had been under the care of Dr. Dillingham, and he had seen it only once. He agreed with the diagnosis of lupus erythematosus.

DR. F. H. DILLINGHAM said that the atrophied tissue, which is very apparent now, was not especially noticeable when the woman first came under observation. The lesions on the hand also appeared during the past few weeks. Under the use of potassium iodide there appears to have been considerable improvement.

DR. LUSTGARTEN said he regarded the case as rather an uncommon one of lupus erythematosus, and a difficult one to treat.

DR. ALLEN said that while some of the lesions resemble those of syphilis, those on the scalp and face are evidently lupus. He expressed the opinion that there may be present a combination of the two diseases—lupus and syphilis.

DR. FOX said that from the appearance of the lesions on the scalp and around the ears he would make a diagnosis of lupus erythematosus.

DR. ELLIOT also made a diagnosis of lupus erythematosus. The lesions of this disease, he said, sometimes simulated those of syphilis.

DR. BRONSON inquired whether any of the members have ever observed lupous patches undergo ulceration, as they had in this case.

DR. CUTLER said he felt inclined to agree with Dr. Allen that the case was one of lupus occurring in a syphilitic subject. In some of the lesions, especially those on the hand, there appears to be a syphilitic element present.

DR. SHERWELL said he agreed with Dr. Allen that the case was one of lupus in a syphilitic subject.

DR. TAYLOR called attention to the fact that no evidence had been adduced that the woman ever had syphilis. In the discussion of these cases he thought the members should confine themselves to established facts, rather than base their opinions on presumptions and theories.

DR. SHERWELL said that in spite of the fact that no history of syphilis had been obtained in this case, he considered that the inference drawn from the appearance of the lesions was a fair one.

DR. ALLEN, in reply to Dr. Taylor's remarks, said that in many of the cases presented at the meetings the history is unsatisfactory and incomplete, and the opinions expressed must of necessity be based on the appearance of the lesions.

DR. DILLINGHAM said he was inclined to think that there was a combination of the two diseases—lupus and syphilis—in this case. He did not see how the papules on the neck could be accounted for by lupus. The lesions on the scalp and ears are typical of lupus.

DR. FOX, in reply to Dr. Bronson, said he has observed lupous patches undergo ulceration. In one case of erythematous lupus of the scalp of long standing the patches would ulcerate at times and would sometimes disappear entirely, reappearing again very suddenly. Kaposi has described such cases. As regards the presence of syphilis in this case, Dr. Fox said he has always held the opinion that by a skillful diagnostician the diagnosis of syphilis should be made by the skin lesions alone. He does not believe that syphilis modified other skin eruptions as much as the majority of physicians imagine. It very rarely, if ever, produces any modification of psoriasis, lupus, or any other distinct skin affection.

DR. DILLINGHAM called attention to the fact that marked benefit has been derived from the use of potassium iodide since the patient first came under observation, which is rather unusual in lupus in such a short time.

DR. ROBINSON said that while he agreed with the diagnosis of erythematous lupus, many of the lesions are very much like those of syphilis.

DR. TAYLOR said that the potassium iodide given may have had some effect on the appearance of the lesions.

A Case of Lymphangioma Circumscriptum.—Presented by DR. ROBINSON.

The patient was a young girl. The lesion was situated on the left side of the neck, and has been present since birth. Part of it is covered by a scar, which is the result of treatment received some years ago. The grouping of the lesions, the clear, vesicular character of some and the reddish color of others, would justify the diagnosis of a hæmo-lymphangioma.

DR. SHERWELL said he thought the lesion was a nævus unilateralis.

DR. ELLIOT pronounced the lesion a hæmato-lymphangioma, owing to its vascular condition.

DRS. TAYLOR, KLOTZ, FOX, and ALLEN agreed with Dr. Robinson's diagnosis.

DR. LUSTGARTEN said the lesion belongs to the class of nævi. The diagnosis, he thought, rested between syringo-cyst-adenoma and lymphangioma. A microscopical examination would be necessary to decide it.

DR. ROBINSON said that the lesion had all the characteristics of a lymphangioma, excepting that it had not extended beyond a certain area.

A Case of Lupus Vulgaris.—Presented by DR. CUTLER.

The patient was a female—an Italian. No history was obtainable. She presents certain lesions on the right side of the face and on the forehead; the former have existed for about six months; the latter about a month or so. The speaker said he had cut into one of the lesions, and the gross appearance was typical of lupus vulgaris. A microscopical examination had not yet been made.

DR. ROBINSON said some of the lesions resembled lupus erythematosus, while others looked more like lupus vulgaris.

DR. BRONSON said he was inclined to think the case was one of lupus erythematosus rather than vulgaris.

DRS. ALLEN and LUSTGARTEN agreed with Dr. Cutler.

DR. ROBINSON said some of the lesions resembled lupus erythematosus while others looked more like lupus vulgaris.

DR. KLOTZ referred to certain scars that were present, and thought they might be the result of treatment.

DR. CUTLER, in closing the discussion, said that the woman had received no treatment until he saw her a few days ago. Some of the lesions had existed for over a year. The appearance of the lesions, their location, and the amount of infiltration led him to believe that the case was one of lupus vulgaris.

Photograph of a Case of Lupus Vulgaris.—Exhibited by DR. ELLIOT.

The patient was a woman, aged forty-six. The lesion appeared on the face as a small papule, and gradually increased in size, its course being typical of lupus erythematosus. A microscopical examination of a section of the lesion revealed typical lupous tissue and the presence of tubercle bacilli.

DR. JACKSON said that in one case of supposed lupus erythematosus, which he had under observation for over two years, the patient had markedly enlarged glands in the neck. After these were removed the lesions on the face disappeared.

DR. ELLIOT stated that he had at present under his care a case of impetigo herpetiformis of Hebra in a male at the Skin and Cancer Hospital, and he would be pleased to have the members of the society see it. The patient also has a tubercular pleurisy and a mitral murmur.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY : STATED MEETING, HELD ON TUESDAY, NOVEMBER 13, 1894.

DR. L. BOLTON BANGS, *Chairman*.

A Case of Hypospadias cured by Plastic Operation.—Presented for DR. B. F. CURTIS by DR. ROGERS.

The case was one of congenital hypospadias in a boy aged thirteen years. The double-flap operation was performed by Dr. Curtis, about a month ago, with a very good result. The upper flap sloughed off, and a small sinus still remains. The bladder was drained for about two weeks through the perinæum.

A Rare Case of Fibro-cystic Tumor of the Scrotum.—DR. F. T. BROWN reported this case and presented the patient. He also exhibited a number of colored drawings in connection with the case. The patient was a young man, aged nineteen years, a clerk by occupation, and a native of Brazil. He came to this country when he was five years old. He had typhoid fever five years ago. In June, 1894, he had an attack of gonorrhœa. When he was six years old his father first noticed a lump, the size of a marble, lying between the testes. He himself, however, never noticed anything abnormal about his scrotum until June 14, 1894, two weeks after he had contracted gonorrhœa. About this time he began to have pain in that region, and on examination he found a lump which gradually continued to enlarge. He saw a physician, who introduced a trocar and evacuated an ounce or two of clear, yellow fluid. The tumor began to be more painful, especially at night. There was no nausea or vomiting. He came under Dr. Brown's observation on August 11, 1894. The tumor at this time measured fourteen inches and a half in circumference; it filled and distended the scrotum, forcing the left testis upward and outward; the right testis could not be detected. The inguinal glands could be individually felt, but did not seem to be unnaturally enlarged. The tumor was distinctly fluctuating, and gave segmental light transmission. A rectal examination showed a normal prostate and seminal vesicles. Upon the introduction of a needle into the tumor, a clear, yellow serum was withdrawn. An examination of the urine gave the following result: Alkaline; specific gravity, 1.020; no albumin; no sugar; no filaria. The first gush of urine was always accompanied by a quantity of clear, white fluid.

On August 18, 1894, the patient was operated on by Dr. Brown and the growth removed. It was found to be composed of multiple fibro-cystic tumors, benign in character. It was closely attached to the perinæum and to the anterior scrotal wall.

DR. H. GOLDENBERG stated that at the May meeting of the section he presented for diagnosis a case which he regarded as one of multilocular hydrocele of the spermatic cord—an opinion in which several of the members present concurred. An operation, however, showed the case to be one of hydrocele into a hernial sac. In that case the tumor occupied the left half of the scrotum.

DR. BROWN said when he first saw the patient, and learned that he came from Brazil, he thought it possible that the case was one of filaria or lymph scrotum; but this theory was disproved by an examination of the fluid contained in the cysts. After removal of the tumor a perfectly healthy testis and epididymis were found on that side, although the tunica vaginalis was somewhat compressed. The growth did not appear to have any connection with the testis, cord, or epididymis. It seemed to spring from the dartos tunic of the scrotum.

Posterior Urethritis, and the Diagnostic Value of the Modified Thompson Test.*—By DR. H. GOLDENBERG.

DR. R. W. TAYLOR expressed the opinion that Dr. Goldenberg in his paper did not give sufficient credit to Aubert, who was the first man to call attention to the very common occurrence of posterior urethritis in gonorrhœa, and that in a goodly proportion of cases it gives rise to no symptoms whatever. He also very clearly showed that the ordinary so-called Thompson's test was inadequate and of uncertain diagnostic value. About a year after the appearance of Aubert's paper on this subject, his pupil, Eraud, confirmed the same views. Little attention, however, was directed to these observations until the appearance of Dr. Goldenberg's paper, in 1888.

DR. TAYLOR said that posterior urethritis should not be regarded as a complication of gonorrhœa; it is simply an extension of the disease. It is a mistaken idea to claim that the cut-off muscle is in a continual state of spasm; on the contrary, it offers little or no resistance to the extension of the gonorrhœal infection, and the posterior urethra is promptly involved in probably from eighty to ninety per cent of cases.

DR. E. L. KEYES called attention to the importance of fleecy shreds in the urine in the diagnosis of posterior urethritis.

DR. H. G. KLOTZ stated that in primary acute cases of gonorrhœa the presence of flakes in the urine is rather uncommon; they appear only when the discharge grows more scanty. In chronic cases these are often so firmly adherent that it is difficult to wash them out.

DR. GEORGE K. SWINBURNE called attention to the fact that in irrigating the anterior urethra, if the receptacle containing the irrigating fluid is placed at the height mentioned by Dr. Goldenberg (a metre and a half) and the meatus is held tightly against the nozzle, the fluid will pass back into the bladder, while on the other hand, in a certain number of cases, if a small nozzle is used and the meatus is not held tightly against it, the fluid will not enter the posterior urethra, but flow out through the return tube.

DR. EUGENE FULLER said that in irrigating the urethra or bladder the position of the patient is of importance. One writer has claimed that the fluid enters the bladder very readily if the patient be placed in a sort of rocking-chair and rocked backward. Another writer has suggested that the

* See December, 1894, number of this journal.

patient should assume a squatting position and make an effort to urinate, which allows the fluid to enter the bladder. Dr. Fuller also referred to the recent tests made by Guyon and others, which show that when an injection is made into a bladder that has some tone to it, the fluid will be forced up through the ureters and into the pelves of the kidneys much more readily than when the injection is made into a bladder that is in a flabby condition.

DR. JAMES P. TUTTLE said that in making these irrigations the receptacle containing the fluid should be elevated very gradually; by employing gentle pressure at first and slowly increasing it, the fluid very readily enters the bladder.

DR. TAYLOR, in reply to the statement made by Dr. Klotz that flakes are usually not found in the urine until the end of the acute stage of gonorrhœa, said they may be found even in the prodromic stage.

DR. S. ALEXANDER said he did not agree with Dr. Taylor on this point. The small flakes which appear in acute primary urethritis can not be classed among the shreds which are found in the later stages. The former consist of pus cells, epithelium, and bacilli, and are probably not the shreds to which Dr. Klotz referred.

DR. GOLDENBERG, in closing the discussion, said he agreed with Dr. Taylor that due credit should be given to Aubert for his investigations in this subject. He also called attention to the fact that Dr. Klotz five or six years ago reported that after an endoscopic examination made in one hundred cases of urethritis he found the posterior urethra affected in fifty or sixty per cent.

Study of the Gonococcus: A Preliminary Report.*—By DRS. VAUGHAN and BROOKS.

DR. TAYLOR said he felt rather loath to accept the statement that, with the few exceptions mentioned, the gonococci were found in the five hundred cases examined. It has been claimed that in at least five per cent of cases there is a diplococcus which is easily mistaken for the gonococcus. Culture experiments are very important in this connection.

DR. HENRY HEIMAN stated that he is now engaged in certain experiments with the gonococci, the cultures being prepared after the method described by Turo, of Barcelona. Up to the present time, however, his work is not sufficiently advanced to permit him to draw definite conclusions. Certain inoculations which he has made in the lower animals have produced severer forms of urethritis, but the general opinion at present seems to be that such inoculation experiments, in order to be valuable, must be made on human beings. Perhaps, in the near future, more light will be thrown on this subject, so that it will not be necessary to resort to this expedient.

* See page 18.

Selections.

Hereditary Syphilis in the Second Generation. GEORGE ETIENNE (*Ann. de dermat. et de syph.*, vol. v, No. 3, March, 1894).

The author recounts the history of a family under observation in the service of Professor Spillman in the Nancy Hospital. The paternal grandmother died at the age of fifty-five of syphilitic caries of the cranium. The father of the family in question was attacked when thirty-four years of age by an aphasia, which was rapidly cured by mercurial inunctions. He suffered continually from cephalalgia, and was killed by a fall from his locomotive in his forty-first year. The autopsy disclosed no other specific lesion.

In the second generation the results of fifteen pregnancies were these: Five abortions; a child of tardy development, who began to speak at eight years of age; five children afflicted with mental disturbances or with persistent cephalalgia, always ameliorated by antisyphilitic treatment; one daughter, who died of suspicious ulcerative accidents; another girl born in a state of semimaceration, attacked later by a painless ulceration of the palatal veil and by an eruption which left linear white cicatrices; lastly, defective dental formation, which this last child shared with one of her sisters. The abortions did not follow the classic type in syphilitics. The first was preceded by a normal pregnancy, and it was only much later (pregnancies 7, 9, 12, and 14) that they became frequent. At the same time, however, they coincided largely with the tardy outbreaks in the father, the seventh child being carried at the time of his aphasic attack, and the accidents becoming more serious and more characteristic thereafter.

J. C. J.

Bacteriological Study of Soft Chancre. L. CHEINISSE (*Annales de dermat. et de syph.* Vol. V, No. 3, March, 1894).

The author's conclusions, based on fifteen personal observations in which researches were made on the pus of five buboes and thirty-one chancres—fifteen primary and sixteen chancres of inoculation—are as follows:

1. The bacillus of Ducrey appears to be the specific agent of soft chancre, although no cultivation method has been arrived at which will produce the disease by inoculation from pure culture. (The characteristics of the bacillus are its small size, its rounded extremities, which stain deeply, leaving a clear space at the center, its tendency to grouping in chains, its failure to stain with the Gram method, and the impossibility of cultivating it on laboratory media. The author denies the central constriction described by Ducrey, and regards it as identical with the organism found by Unna in his sections. His inoculations were made under mild antiseptic precautions on human subjects.)

2. Without affirming absolutely the specificity of the microbe, its discovery must be considered one of the most important diagnostic points in cases of difficulty. (The claim is made that inoculation, as a means of diagnosis, has not the disadvantage of creating a new chancre.)

3. The pus of buboes, taken at the moment of their opening, is not always sterile; pyogenic micro-organisms are often found, but it is not impossible to

assert the presence of the bacillus of Ducrey. Sterile pus, as well as that containing staphylococci and streptococci, is not inoculable; inoculation with pus in which the bacillus is found gives rise to a typical chancreoid. This is regarded as the weightiest proof of its aetiological significance.

4. Successive inoculations made with all antiseptic precaution do not invariably give the bacillus in pure culture. If there exists in the pus of the primitive chancre a microbe of more rapid development (the micrococcus tetragenus, which was often present as a complication, the staphylococcus pyogenes aureus and the streptococcus conglomeratus, recently described by Kurth), this microbe will be able to inhibit the activity of the bacillus in pustules of inoculation.

5. The microbes which are found in the chancroidal pus with the bacillus of Ducrey are not opposed to the development of the chancreoid, and particularly in the formation of buboes they may "play a rôle of efficient cause."

6. It is desirable that investigators should turn their attention to these adjuvant microbes to determine clearly their part in the morbid process and the relations existing between them and Ducrey's organism.

7. This study, to be complete, must be based on the procedures of multiple research. Microscopic examination of the pus of successive generations (the bacillus can not be cultivated beyond the third) should correspond with cultures of the same pus on different media and with study of these cultivations.

J. C. J.

Disseminated and Successive Gangrenes of the Skin of Hysterical Origin.

BAYET (*Ann. de derm. et de syph.*, vol. v, No. 5, May, 1894).

After a review of the few cases of this interesting condition reported by Sangster, Neumann, Doutrelepon, Renaut, Rothmann, Bayet, and Quinquaud, all of which differ from each other in particular points, but which have a hysteric basis in common, the author gives the history of a boy of nineteen, whose disease began with a superficial sulphuric-acid burn on the left forearm. He was a hysterical subject. The burn healed in twelve days. Two days after the accident the morbid phenomena began to appear. A diffuse redness was first noticed, of much greater extent than the spot, which afterward underwent necrosis; then a number of bright white points, isolated from each other, the first sign of epidermic alteration. These points later took a brownish tint, coincidently with the disappearance of the hyperæmia and a hæmorrhagic focus found about them. The process may be arrested at that point, but ordinarily it goes on. The necrotic points united and formed a large superficial scab of an ochre color. The shedding of the crust left bare a superficial ulceration which healed with difficulty. As a rule, a true cicatrix was not formed; the epidermis was regenerated, but thinner, less resistant, and deeply pigmented. The epidermic regeneration was often interrupted by the formation of sero-sanguinolent blebs. When the process invaded the dermis and a true cicatrix was formed, it often took a keloid aspect. The initial lesion is then epidermic, of uncertain nature but clearly trophic origin. The disease appeared on the left forearm, the site of the burn. The subjective symptoms were marked, but there was no loss of sensation except in the pharynx. Simulation is disposed of by a direct observation made by the author under the surveillance of others.

J. C. J.

Histological Study of Mycosis Fungoides. E. LEREDDE (*Ann. de dermat. et de syph.*, vol. v, No. 5, May, 1894).

The assertion is made that there may exist in mycosis fungoides lesions which, though not appreciable to the eye on the surface of the skin, are nevertheless microscopically demonstrable in cases in which there has never been erythrodermia. The author discovered in a section of apparently healthy skin, in the dermis, a reticulum surrounding the vessels and containing in its meshes fixed connective tissue and small round cells. At the border of one of these infiltrations were found epidermic lesions, consisting of cells with elongated nuclei or resembling the small elements of the derma between those of the Malpighian layer. He believes that lesions pass unperceived in clinical examination, and that in many dermatoses of internal origin the skin is generally attacked, while at certain points only its lesions become perceptible.

Mycosis can further be recognized by its microscopical characters, which are summed up in the following:

Proliferation of connective-tissue cells about the vessels.

Presence of mast cells.

Formation of perivascular masses composed of a reticulum containing connective-tissue cells and lymphocytes.

Appearance of this infiltration in the subpapillary zone with later invasion of the papillæ themselves.

Vascular changes, dilatation, proliferation of endothelium. Giant cells of a peculiar character. Histologically the disease bears no relation to any pathological process whose nature has been elucidated.

J. C. J.

Correspondence.

MARRIAGE OF SYPHILITICS.

Editor JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR: For the purpose of securing reliable statistics on the subject of the marriage of syphilitics, I desire to enlist the assistance of those of your readers who have had experience which will be of value in determining the period when this disease ceases to be communicable and inheritable. I shall therefore esteem it a great favor on the part of any physician who will send me answers to the following questions, and due credit will be given in a future publication to those who desire to aid me in this work:

1. What is the latest period from the date of the initial lesion that you have known the disease to be communicated by a patient who has been from the first under your observation?

2. What is the latest period from the date of the initial lesion that you have known (a) a syphilitic man or (b) a syphilitic woman to become the parent of a syphilitic child?

2. Have you ever known syphilis to be either communicated or handed down at a later period than four years from the date of the initial lesion by

an individual who has been constantly under your observation during that time ?

In answering these questions I should like a brief but complete history of each case, and an account of the treatment that has been pursued.

I hope by this means to obtain the experience of a large number of observers, and to reach a fairly reliable conclusion as to the time when we may safely permit our syphilitic patients to marry.

Yours very truly,

BURNSIDE FORSTER, M. D.

Book Reviews.

Syphilis und Prostitution vom Standpunkte der Öffentlichen Gesundheitspflege. Von DR. A. BLASCHKO. Berlin : Verlag von S. Karger, 1893.

Written not for the physician alone, but for the layman interested in questions of hygiene and public health, this work covers a field which has been much more neglected in Germany than in France. The author takes up the venereal diseases, in the first place, and treats the subjects of syphilis, gonorrhœa, and chancroid with reference to their bearing upon prostitution and its control. He regards syphilis as a very widely distributed, but, for the majority of patients, curable disease, finding that for the most part they remain free after four or five years ; though, taking all cases, treated and untreated, together, ten per cent pass into the tertiary stage. Many late forms implicating internal organs are not recognized.

He considers it beyond question that syphilis is due to a micro-organism ; but whether we accept that of Lustgarten or not, we must assume it to be a bacillus of the kind that not only transfers the disease to others, but causes the different manifestations either directly or indirectly. The possibility of a syphilo-toxine being secreted is mentioned. Views and statistics of many authors are freely quoted to show the extent to which venereal diseases exist in various cities and countries, and much attention is given to the different methods of infection. Chapters follow upon prophylaxis of venereal disease ; regulation and abolition of prostitution, sanitary control, etc. The author believes that certain reforms are necessary in the matter of control, and that it is a question to be dealt with by the medical profession rather than by the police authorities. Examinations for gonococci should be insisted upon ; the number of examining physicians should be increased ; examinations in hospital should be more thorough, and the patients should be retained longer. Hospital treatment should take the place of incarceration, and all mild cases, as well as those discharged from hospital, should receive dispensary care. A plea is also made for a better preparation of students in the subjects of venereal disease.

The work is written in an interesting style, and with a phraseology sustaining the attention in long-drawn-out sentences, which the German reader so admires. Those interested in the subject and not thorough German scholars will be repaid for the occasional difficulties to be overcome in getting through the two hundred pages.

C. W. A.

Auto-Intoxication in Disease. CH. BOUCHARD. Translated by THOMAS OLIVER. Philadelphia: The F. A. Davis Company, 1894.

There is much in this volume that is striking, not a little that is new, and much more that is worthy of the deepest thought and study of every man whose life-work lies in the field of medicine. The subject is a broad one. It has forced itself into great prominence in latter years, as the part played by bacteria and the toxic products of their activity has become more and more elucidated. The author does not confine himself to bacterial poisoning, however, for he includes in his intoxications all the systemic poisonings which result from the toxicity of retained products of tissue change. The experiments performed by Bouchard in support of his own hypothesis, or in testing those of others, are always interesting and generally convincing. His work on the *Toxicity of Urines* is undoubtedly his best as well as his most celebrated. It occupies ten chapters following the general considerations of the subject. The value of the work by no means lies wholly in the pathogeny of intoxication; the conclusions reached by observation and experiment are put to practical use in pointing out clearly the lines along which therapeutics should proceed. The therapeutic indications in uræmia are, he finds, those proved by practice: diuretics (milk, in particular), intestinal antiseptics, bleeding in acute cases for accidents, and oxygen administered by inhalation. In typhoid fever he groups them under four heads—general antiseptic treatment—consisting of a purgative given every three days and forty centigrammes of calomel a day for four days; intestinal antiseptics, consisting in administration of a mixture of charcoal, iodoform, and naphthalin (which last seems to occupy first place in the author's estimation, elsewhere as well), and intestinal lavage; antithermic treatment by baths at 38° C., and gradually cooled to 32° C.; and a regimen of barley broth, glycerin, and peptones, no milk, and lemonade with a little wine—a complicated system, as he says, but one by which the mortality has been reduced in his service to seven per cent since 1884. These extracts will serve to indicate the thoroughness of the teachings.

It is impossible in a limited space to give even an idea of the scope of the work or approach a *résumé* of it. The latter would be wholly out of place in any case, since the final chapter is given over to a summing up of what has gone before. It will be well, however, to indicate the subjects to which places are given. They are, briefly, the toxicity of urines and uræmia, already referred to, intestinal auto-intoxication by constipation, indigestion, by tainted meats, dilatation of the stomach—a disease much overlooked and neglected, not to say little understood, if Bouchard's views are correct—typhoid fever, intoxication by bile, in diabetes, cholera, and the final recapitulation.

The translation is not what the work deserves. It is often halting, the sentences being clumsily constructed, presumably in the endeavor to make a literal rendering of the French. The translator's notes add nothing to the text, but the indexing of the chapters—also his work—is admirable. He takes occasion, in his preface, to disclaim all responsibility for "Americanisms in spelling." We do not remember ever to have seen the word "awanting," which occurs twice on page 69, in an American work; and "pea-soupy," referring to choleraic discharges, is a barbarism entirely foreign to the diction of the best writers on this side of the Atlantic.

J. C. J.

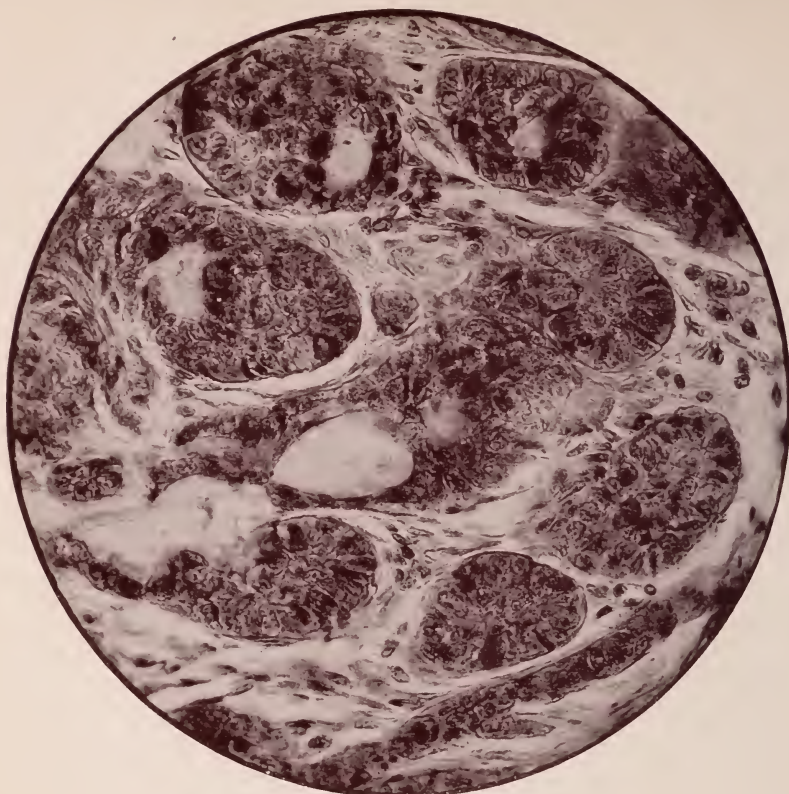


FIG. 4.—Spencer $\frac{1}{4}$ in., $\times 400$.

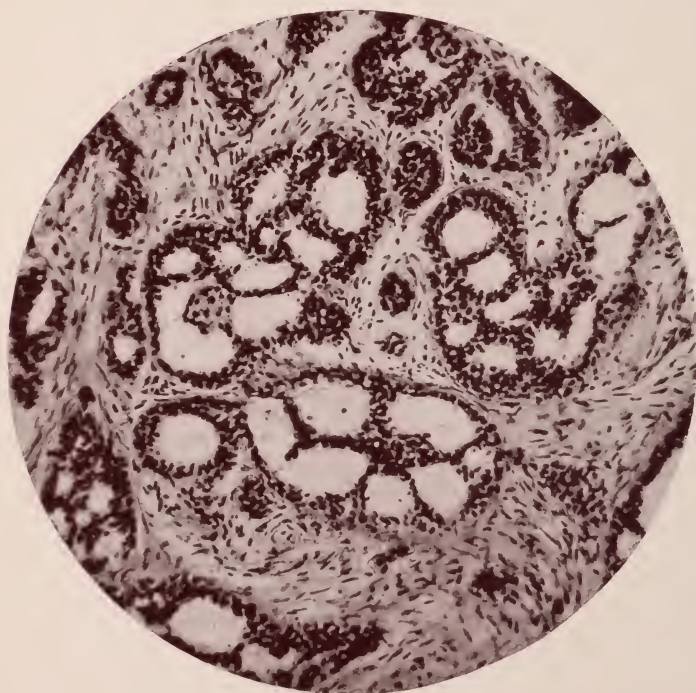


FIG. 6.—Spencer $\frac{1}{2}$ in., $\times 150$.

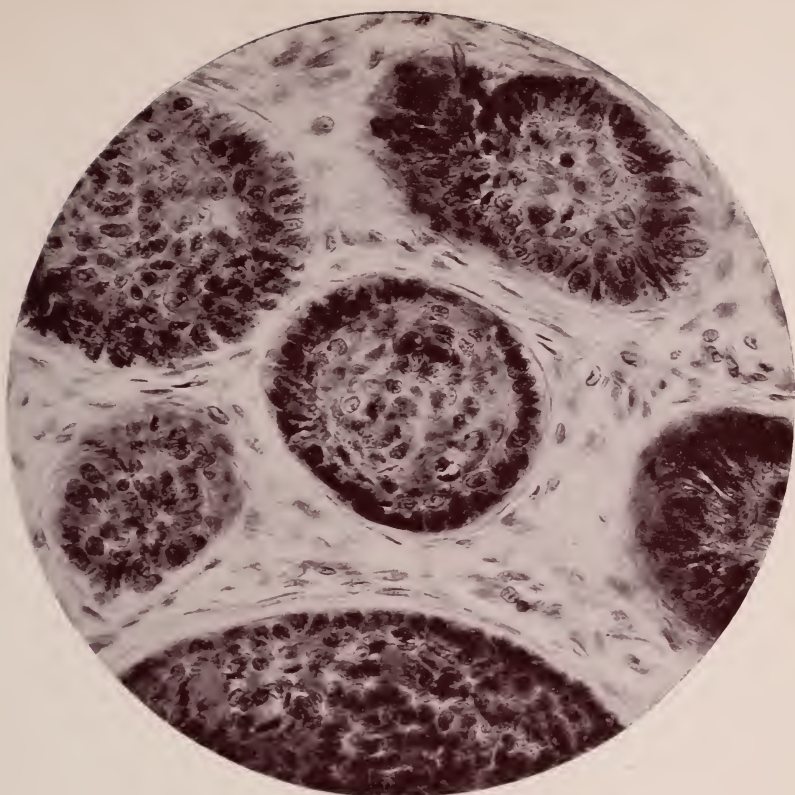


FIG. 5.—Spencer $\frac{1}{2}$ in., $\times 400$.

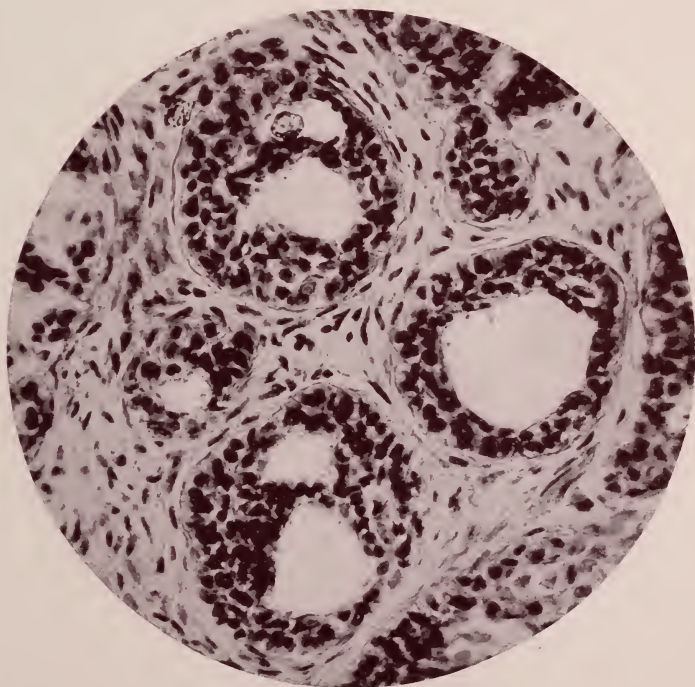


FIG. 7.—Spencer $\frac{1}{2}$ in., $\times 400$.

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ADENO-CARCINOMA OF THE SKIN ORIGINATING IN THE COIL GLANDS.*

By J. A. FORDYCE, M. D.,

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CANCERS of internal organs are generally the result of an abnormal proliferation of the glandular epithelium of the part affected. In the skin, on the contrary, the epidermis is the structure which is most frequently first involved. The squamous-celled epithelioma, or the lobulated variety of the French writers, undoubtedly starts in those cells of the epidermis which are destined to form the stratum corneum. Certain varieties of skin cancer which have their point of departure in the epidermis are made up entirely of small epithelial cells which preserve the character of the cells in the lowermost rete layer. These cells extend throughout the cutis and subcutaneous tissue in the form of tubular processes, showing no disposition to form epidermic "globes" or horny tissue. It is difficult to explain why the epithelium in one variety of these malignant growths should always produce, although in an abnormal manner, the form of cell in which it in a physiological manner ends its existence, while another variety preserves its embryonic or original character.

We may suppose that certain epidermic cells have in themselves the power to develop into horny tissue, while others do not possess

* Read at the Eighteenth Annual Meeting of the American Dermatological Association, Washington, D. C., May, 1894.

such power, or are destined for another purpose, such as the formation of the glandular appendages.

In that rare variety of malignant cancerous new growth in which pigment-bearing cells predominate, it is possible that yet another variety of epithelial cell is first involved.

The tubular variety of skin cancer, to which type the so-called rodent ulcer belongs, may originate from the epidermis, from the outer root sheath of the hairs, or possibly from the glands of the skin.

Although many attempts have been made to show that it has a uniform pathology, such efforts have been unsuccessful, as in specimens removed from epitheliomata, which are clinically of the same class, various points of origin, either alone or combined, have been noted.

From whatsoever structure epitheliomata arise, after a certain duration the original arrangement of the cells may be lost in the tendency which they show to arrange themselves in alveola which bear a close resemblance to those met with in mammary or other glandular carcinomata. I have, during some recent investigations of cutaneous new growths, excised a number of small pearly tumors which are seen with more or less frequency on the faces of middle-aged individuals. Such small tumors not infrequently exist for many years without ulceration or any change to indicate a malignant tendency. After excision, partial or complete, the wound heals kindly, and no sign has afterward been observed which would point to a recurrence of the growths.

Microscopic examination has shown such tumors to consist of epithelial downgrowths from the epidermis, which in many cases had undergone a partial or complete degeneration of a hyaline nature. With this degeneration of the cell the power of proliferation which it originally possessed is lost and the new growth comes to a standstill.

In other instances, however, the center of the tumor will slowly ulcerate while extension at the margin takes place, giving rise to an open epitheliomatous ulcer whose peripheral cells readily take the microscopic stains and show active cell division. These pearly tumors have many points of resemblance, both in their clinical features and pathological anatomy, to the affection which has been described under the various names of *hydradénomes éruptifs*, *adénomes sudoripares*, syringo-cystadenom, adenoma of the sweat glands, benign cystic epithelioma, etc.

This curious affection, at first considered to be a benign epithelioma having a sweat-gland origin, has been shown to originate in the epidermis and to be independent of the coil glands. Its benign nature, too, has been questioned, as in the case lately reported by Dr. White, open epitheliomatous ulcers resulted from a number of the sup-

posed benign tumors. As the predilection of cancer in general for the glandular structures is so strongly marked, the temptation has been strong among many pathologists to attribute to certain cutaneous epitheliomata such an origin without sufficient proof that such was the case. An examination of many of the usual forms of cancer situated at a distance from the mucous membranes will show a structure made up of tubules of small epithelial cells, which suggest in a striking manner overgrown and abnormally proliferated sweat ducts or glands. This is the case in the so-called benign epithelioma and in other varieties of skin cancer.

Although a wide difference of opinion exists among pathologists regarding the rôle played by the sweat glands in tumor formation, there are few well-authenticated examples of adenomata which can be directly traced to these organs. Virchow (*Die krankhaften Geschwülste*, Bd. iii) had never seen a single example of such a tumor.

Rindfleisch (*Lehrbuch der patholog. Gewebelehre*) found a flat, warty-like elevation of the skin to be on section a tumor originating in the coil glands. Peterson (*Archiv für Dermat. und Syph.*, 1892, p. 919) reported a case of nævus verrucosus unius lateris, which proved on microscopic examination to be an adenoma of the sweat glands. He expressed the view that the tumor originated not from the fully developed gland, but from some disturbance in its embryonal development. In a later article (*Beiträge zur Kenntniss der Schweissdrüsen-Erkrankungen*, *Archiv für Dermat. und Syph.*, 1893, p. 445) he concludes, from a further examination of the same case, that the tumor started from the ducts of the fully developed glands.

Elliot (*Journal of Cutaneous and Genito-Urinary Diseases*, 1893, p. 168) found a similar pathological condition of the coil glands occurring in a nævus unius lateris of the shoulder, which had existed since childhood. Elliot preferred to give the name adeno-cystoma to the pathological condition which he found, there being no new formation of glandular tissue. He further believed the process to be secondary, and developed in consequence of the irritation to which the nævus had been subjected.

While it is not improbable that adenomata of the sweat glands may remain in a quiescent state for a long time before giving rise to malignant epitheliomata, there is very little proof, either in the clinical course or pathological anatomy of such malignant growths, to show which ones had such a beginning.

Thiersch and Waldeyer have described primary cancer of the sweat glands, but the attempts which have been made by Cornil and Ranvier, Thin, and others to prove that all tubular epitheliomata of

the skin have such an origin have not been successful. Neither the shape, size, nor arrangement of the cells are sufficient criteria on which to base the diagnosis of sweat-gland epitheliomata.

Darier (*Contributions à l'étude de l'épithéliome des glands sudoripares*, *Archives de méd. expérimentale et d'anat. pathol.*, 1889, pp. 115 and 267) has reported a peculiar case occurring in the service of Besnier, in which multiple, deep-seated, and painful tumors developed with great rapidity on the trunk of a man aged seventy-one. Darier's examination showed that each tumor started with a proliferation of the sweat-gland epithelium, which filled the lumen of the canal, broke through the *membrana propria*, and infiltrated the connective tissue. He gave to his case the name "diffuse multiple epithelioma of the sudoriparous glands," and believes it to be unique in the number, the rapid evolution, and the structure of the tumors. The author was able in medical literature to find but two analogous cases, one of which was reported by Malherbe, the other by Creighton. In the latter case a dog was the subject of the affection.

Darier (*loc. cit.*) has quoted a number of cases collected from literature in which a sweat-gland origin of the tumors in question was probable. These cases are briefly as follows:

Henocque and Souchon (*Gaz. hebdom.*, 1866, p. 310) observed a tumor on the back of a man aged thirty-four which had existed for eight years. At first its growth was slow, later it became more rapid. The authors concluded from its microscopic structure that it was an adenoma of the sudoriparous glands.

Cristol (*Gaz. hebdom.*, 1886, p. 364) observed a tumor with a similar structure on the back of a woman aged thirty-three. The growth was stationary during many years, but finally ulcerated deeply, and was believed, on microscopic examination, to have had a sweat-gland origin.

Chandelux (*Arch. de physiol.*, t. xiv, 1882) published a report of a painful subcutaneous tumor the size of a pea which had existed six years on the forearm of a woman aged forty-three. The author was able to determine a proliferation of the epithelium lining the sweat glands, which he believed to be the starting point of this growth.

Liénaux (*Ann. de méd. vétérinaire*, avril, 1888) examined a tumor the size of an egg which affected the skin of a dog. His examination showed pretty conclusively that the glands under consideration gave rise to the new growth.

Cornil and Ranvier (*Jour. de l'anat. et de la phys.*, 1865, pp. 256 and 466) were able to demonstrate the development of a cancer of the leg from the coil glands. The careful study of this case by the authors leaves little doubt regarding the structure first involved, which is ad-

mitted by Darier to be incontestably an epithelioma of the sweat glands.

Equally good pathologists differ regarding the part played by the sweat glands in the production of tubular epithelioma. While it is admitted by many that their epithelium may proliferate in many forms of skin cancer, it seems difficult to determine in what class of cases this proliferation is primary. The slow clinical course and non-implication of the lymph glands were supposed, among other symptoms, to indicate a growth which took place at the expense of the sudoriparous glands. When in a growth of this character epithelial processes recalling the shape of the sweat ducts were encountered, the conclusion was reached that these glands were their original point of departure. It is an error to suppose that any universal law can be formulated from either the clinical course or histological structure of such growths; their location on the skin away from the mucous orifices, where there is less irritation and less vascularity and lymphatic supply, as has been observed by Besnier, Hutchinson, and others, seems to have more to do with their benign course than a fixed origin or structure. I have examined many cases of such epitheliomata from the face, presenting typical tubular prolongations of epithelium, with no tendency to the formation of horny epithelium, and very frequently could trace their origin to the interpapillary processes of the rete or to the hair follicles, both the sweat and sebaceous glands being unaltered. While it is not denied that either or both of these glands may give rise to the tubular epithelioma, the proof that such is the case is difficult to obtain, as the ulcerative process so soon destroys the tissues which may be first involved.

It is probable that rodent ulcer and tubular epithelioma are pathologically identical. Thin (*On Cancerous Affections of the Skin*, London, 1886) has expressed this view, and has endeavored to associate it with a sweat-gland origin. He does not believe it to be identical with an epithelioma starting from the rete Malpighii, though admitting that the clinical diagnosis is not easy to make. Walker (*British Journal of Dermatology*, September, 1893) is the most recent advocate of the glandular origin of rodent ulcer. His argument is that in its structure it corresponds to glandular cancer, and that when carcinoma of the breast secondarily attacks the skin it is almost identical with rodent ulcer.

In most of his cases he was able to trace an origin to the sweat glands. The slow course of the ulceration is to be attributed, according to this author, to the normal slow growth of the glandular epithelium, the rete cells having a rapid growth.

The case which forms the subject of this report differed in its clinical features from the usual type of cutaneous cancer in which a sweat-gland origin has been claimed. Unfortunately, the duration of the tumor before the stage of ulceration was not noted. It may be said to have some clinical resemblance to the cases reported by Henocque and Souchon and by Cristol. It would have been a matter of some interest to have determined whether it began as a deep or surface affection.

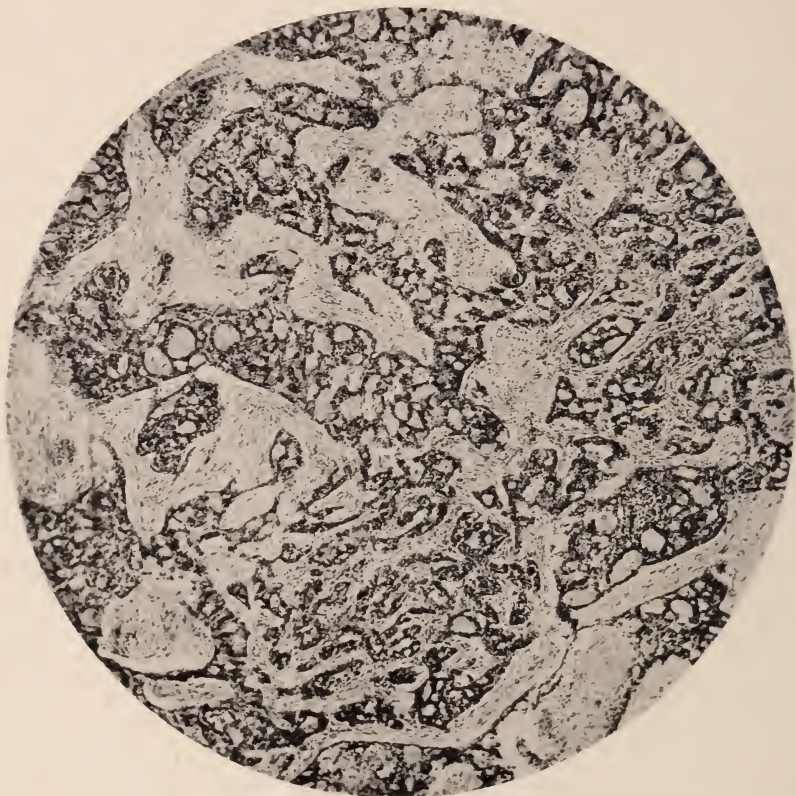


FIG. 1.—(Spencer 1 in. \times 60.) Showing the distribution of the epithelial tissue and its adenomatous structure.

Dr. Bronson, in whose service at the City Hospital the case occurred, excised the tumor from the anterior surface of the leg of a man thirty-five years old, and kindly gave it to me for examination.

It is interesting to note that the cancerous nature of the new growth was not suspected prior to a microscopic examination made before the operation of excision.

The growth was composed of distinct lobules, separated by the ingrowth of connective tissue; it was soft to the feel, about half the size of a small egg, and defined from the surrounding tissue without being distinctly encapsulated. It extended about one inch below the skin, and measured an inch and a half in its long diameter. An open ulcer, somewhat larger than a silver dime, was present over the tumor. Portions of the growth were fixed in Flemming's solution, Foa's solution, and in absolute alcohol. Sections were stained in hæmatoxylon, safranine, Biondi's mixture, and in other ways.

Under a low power (Spencer one inch, Fig. 1) the derma is seen to be occupied by bands, masses, and glandlike arrangements of small epithelial cells which stain imperfectly in places. The cell masses and

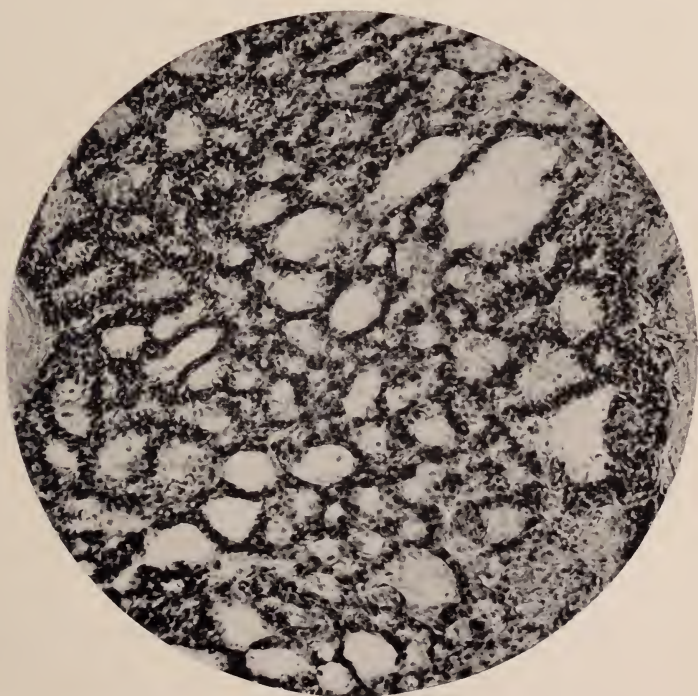


FIG. 2.—(Spencer $\frac{1}{2}$ in. \times 150.) More highly magnified field of a portion of Fig. 1.

bands extend from just below the epidermis, which is unchanged except at the location of the ulceration previously mentioned, to the subcutaneous connective tissue which is penetrated by them.

They differ in their arrangement from that met with in other varieties of skin cancer, suggesting to the observer at the first glance

an attempted reproduction of glandular tissue, which becomes still more noticeable when higher amplification is employed (Fig. 2).

Here a highly complicated network has been formed by the interlacement of bands of epithelial tissue, inclosing cavities which are partially or completely filled with degenerated cells or with a homogeneous substance allied to colloid matter.

Cystlike cavities are seen in other parts of the microscopic field which are lined by a single layer of columnar epithelial cells which present a striking resemblance to overgrown sweat ducts.

In other instances the cell layer is double and quite regular in arrangement; while, again, the overgrown ducts or glands are completely filled with cells or show a localized overgrowth at one or more points. In Fig. 3 an overgrowth of columnar epithelium is shown which probably represents an early stage of the malignant process.

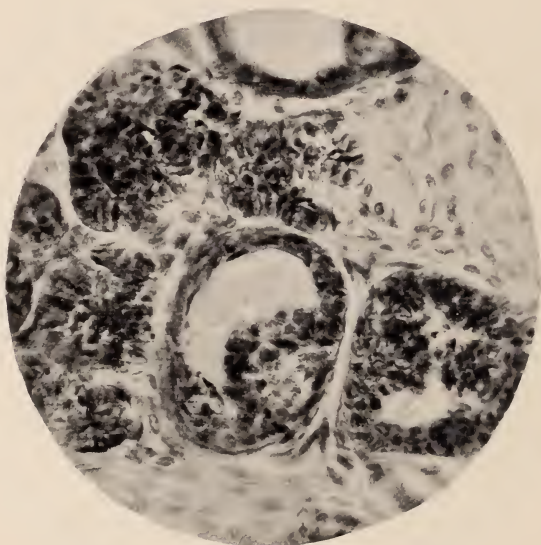


FIG. 3.—($\times 300$.) Showing the beginning proliferation of the glandular epithelium.

Fig. 4 (plate) represents a group of enlarged and proliferating sweat ducts cut transversely. The columnar shape and regular arrangement of the peripherally located cells are well shown. These cells are situated upon a basement membrane, and are an almost exact reproduction of those normally met with in the sweat glands, although here very much hypertrophied. The lumen of the tubules is completely filled by the growing and multiplying cells, and in places the basement membrane is penetrated and the surrounding connective tissue

infected by them. This photomicrograph is made from a section taken from a portion of the tumor fixed in Flemming's solution. Consequently the cells are much less deeply stained.

In Fig. 5 (plate), where the same amplification is employed, the tubules are larger, of irregular size, and their caliber completely occupied by the newly formed cells, which are also seen in places breaking through the membrana propria and infiltrating the connective-tissue stroma. This infection of the surrounding connective tissue may be accepted as positive evidence of the malignant character of the new growth.

Figs. 6 and 7 (plate) represent in a striking manner the adenoma-like structure of the new growth, together with the intracanalicular proliferation of the basement cells. The cavities are lined by a double row of cubical cells, which are united in places by connecting bands, dividing the lumen of the tubes into various sized and shaped cavities.

The outlying portions of the tumor have lost their glandlike structure, and assume the appearance of an alveolar carcinoma.

The other anatomical structures of the skin were not implicated in the cancerous process, neither was there any evidence of a tendency to cell-nesting or the formation of epidermic "globes." The epithelial processes met with in the small-celled cancer of the skin, starting in the rete Malpighii, resemble at times some of the cell arrangements in the case under consideration. In the epidermic cancer, however, the cells are larger, and do not rest upon a distinct basement membrane, as in this case. Furthermore, the epithelial bands or tubules starting from the reté have no distinct caliber, and do not reproduce so perfectly the glandular structure.

Frequently, when a new growth has reached the size of this one, its point of departure has been destroyed by ulceration or in some way obliterated, so that it is not possible to determine from what structure the epithelial proliferation was primary. The adenomatous character of the new tissue is so apparent here, and differs so radically from those cases starting from the other anatomical divisions of the skin, that an error of this kind could scarcely be made. Active cell division (karyokinesis) was well shown in the Flemming preparations, stained with safranin, denoting a rapid growth of the new tissue.

The intracellular bodies (so-called parasites of cancer) will not be considered at this time, as I desire on some future occasion to discuss their relationship to the cancerous process.

While believing that the manifestations of the malignant disease can best be explained by the parasitic theory, I am not prepared to admit that its cause is found in these bodies.

Prognosis.—Unfortunately, the case here presented has not been seen since the tumor was excised, so that the question of recurrence of the growth can not be considered.

Such cases are too rare to permit any expression of opinion regarding their malignancy as compared to other cutaneous cancers.*

66 Park Avenue.

THE QUESTION OF CONTAGIOUSNESS OF MOLLUSCUM CONTAGIOSUM.†

By HENRY W. STELWAGON, M. D.,

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FROM the time of Bateman till the present the question of the communicability of molluscum contagiosum has been the subject of periodical discussions. For several years the literature would remain comparatively free, and then would appear one or several papers bearing upon the contagiousness or non-contagiousness of the disease, with case presentations showing one or the other side of the problem. It is noted, however, as each succeeding wave of discussion subsided, that the advocates or believers in its contagiousness had gained ground and increased in numbers. The last aggressive advance during the past eight or ten years has been one fruitful in results, and to-day the communicability of molluscum contagiosum must, I think, be accepted as an established fact. That is the conclusion to which a careful examination of the affirmative evidence in our possession, a greater part of which I shall briefly review, must inevitably lead. For much of the material antedating 1872 I am indebted to that admirable presentation of the subject made by Duckworth in volumes iv and viii of *St. Bartholomew's Hospital Reports*.

For convenience' sake the evidence to be cited may be arrayed under four heads: 1. Clinical examples of communicability from one to several members of a household and from family to family, etc. 2. Clinical examples of its spread through asylums, schools, hospitals, etc. 3. Examples of accidental inoculation. 4. Successful experimental inoculation.

* The photomicrographs used in illustrating the article were taken with the lenses made by the Spencer & Smith Optical Co., of Buffalo, N. Y., especially corrected for photography with yellow or yellowish-green light as suggested by Dr. H. G. Piffard, of this city. They are reproduced by the half-tone process, and necessarily lose some of the details seen in the originals.

† Read at the eighteenth annual meeting of the American Dermatological Association, Washington, D. C., May, 1894.

Negative evidence, such as the occurrence of the disease in isolated cases and the failure in most instances of the attempts to produce the disease by inoculation, which has often been advanced as militating against the contagious view, has, in my judgment, no weight whatsoever as against the positive facts pointing unmistakably to the contrary. That contagion is difficult to trace in such instances does not admit of question; but in a disease in which the contagious principle, the means and method of contagion are as yet not positively known, this is not to be wondered at. Moreover, even in such actively contagious diseases as ringworm the source of the affection can not always be ascertained; and in some instances, too, even of this disease, single cases in a family will exist without the others becoming affected. If in such an actively contagious disease this may occur, it certainly can not be surprising for the same to happen, even more frequently, with a disease less actively contagious. As to the inoculability of the disease, one success will weigh against hundreds of failures; other diseases admittedly contagious are often difficult to inoculate experimentally, and in a given number of attempts the successes will be found to be relatively small as compared to the failures. With these preliminary remarks the subject may be considered under the several headings referred to.

1. CLINICAL EXAMPLES OF COMMUNICABILITY FROM ONE TO SEVERAL MEMBERS OF A HOUSEHOLD AND FROM FAMILY TO FAMILY, ETC.

Bateman's Cases (Delineations of Cutaneous Diseases, London, 1817).—(a) A young woman whose face and neck were disfigured by numerous mollusca had received the eruption from a child which she nursed, on whose cheek a large lesion of the same disease existed and who had doubtless been infected by a former nurse on whose face the same eruption had been observed and who had also communicated it to two other children in the family. (b) Another instance where a child was infected by an older child who was in the habit of nursing and fondling it and on whose face the disease had previously appeared.

Thomson's Cases (quoted by Paterson, Edinburgh Medical and Surgical Journal, 1841, vol. lvi, p. 280).—(a) In one family the eldest boy was affected first and was supposed to have caught it from a play-fellow; a younger sister and infant brother subsequently contracted it. (b) In another instance the child of a farmer presented the disease, presumably caught from a child of one of the farm servants; the nurse of the child became affected on the neck in the region where the infant usually laid its head.

Henderson's Cases (*Edinburgh Medical and Surgical Journal*, 1841, vol. lvi, p. 213).—Four cases—three in one family, one after the other, presented the disease; the fourth case was the child of a neighbor in the habit of playing with the others.

Paterson's Cases (*Edinburgh Medical and Surgical Journal*, 1841, vol. lvi, p. 279).—(a) A child of a Newhaven fishwife presented lesions about the mouth and nose; the mother who suckled it became the subject of the disease, which was confined to the areolar region of the mamillary gland. (b) In another instance a child was affected on the neck and shoulders, and the disease was believed to have been caught from a girl who had previously carried it about and who was the subject of similar cutaneous tumors. (c) In another instance, a man and his wife had the eruption about the genitalia.

Cotton's Cases (*Edinburgh Medical and Surgical Journal*, 1848, vol. lxi, p. 82).—A girl aged fourteen had the disease on the hands and arms; next an infant sister, six months old, suffered on the arms, chest, and thighs; and three months subsequently another sister presented lesions on the head.

Caillaud's Cases (*Traité pratique des maladies de la peau chez les enfants*, 1859, p. 54).—A youth presented with the disease upon the face of more than six months' duration; his sister, aged fourteen, had, for a somewhat shorter period, numerous tumors on the neck and face; they both used the same towel.

Hardy's Cases (*Leçons sur les maladies de la peau*, 1863, p. 98).—(a) A nurse had four or five mollusca on her breast; the child suckled by her had similar tumors on the parts of the face which came in contact with the diseased breast. (b) In another instance a nurse having charge of a patient who had molluscum tumors, developed on the backs of the hands, and subsequently on the body, similar growths; her companion, a woman who lived in the same room with her, and whose hair she often combed, subsequently caught the disease, presenting lesions on neck and hands.

Erasmus Wilson's Cases (*Diseases of the Skin*, fifth edition, 1863, p. 653).—A girl, aged four, presented fifteen to twenty tumors; next an infant sister and another sister, aged six, contracted the disease; the mother also had several lesions on the neck, and the remains of some on the face.

Neligan's Cases (*Practical Treatise on Diseases of the Skin*, 1866, p. 305, Dublin).—Two instances in which the disease was communicated by children to adults, in each instance members of the same family.

Duckworth's Cases (St. Bartholomew's Hospital Reports, vol. iv, 1868, and vol. viii, 1872).—There were several series: (a) The disease was first noticed in an infant, from whom it spread to two or three brothers and sisters of varying ages up to nine years. It then spread to another child, a girl, aged nine, living in the same house; then to her infant sister; and later to a brother, aged six. The latter infant was often left with a neighboring family, and played with a three-year-old child, who some time afterward developed several tumors; another child in the same house (lodging house) also presented with numerous mollusca on the chin and neck. (b) A girl, aged eight, presented several mollusca about the upper face which had existed seven months; a younger sister had two lesions on the face which came some months after the disease developed in the first case, and recently a tumor appeared on the baby, aged five months, who was often nursed and kissed by these children. (c) A girl, aged nine, had tumors about her mouth a month before her next younger sister had them on the eyelids; four or five months subsequently several mollusca appeared on the baby's face. (d) A boy, aged two, with numerous tumors on the face and neck, which had existed for nine months; a sister, aged sixteen, had a similar lesion on the eyelid twelve months before, and her next brother one on his forehead a month after hers was observed. (e) A woman with mollusca upon the face and mammæ; the infant which she carried and suckled had likewise mollusca upon the face and neck; her eldest boy, aged three, had these growths for many months before the others became affected; finally, the grandmother who lived with them presented the disease. (f) A girl, aged fifteen, with several mollusca on the face; she had had crops of the tumors for two years, and her sister believed that she caught them from an infant nephew (son of this sister) who lived in the house. A younger sister, aged thirteen, had lately become affected; she sleeps with the first case. (g) A girl, aged five, with a number of mollusca on the neck, face, and front of the thorax; she had had them for twelve months; the baby, aged three months, had a tumor near the right outer canthus. These two children slept together. (h) A girl, aged seven, presented the disease; her younger sister, aged five years and a half, contracted the disease, showing several lesions on the face and finger; these two children slept together. A still younger sister, aged twenty months, also had mollusca around the eyes and on the finger. (i) A boy, aged three years and a half, with several lesions on the face and one on the thigh; a brother, aged seven, also had two mollusca on his face. (j) A patient, aged two, presented a number of tumors on the face and arms; the baby, aged eleven months, had one tumor.

Living's Cases (*British Medical Journal*, January 6, 1872, p. 11).—Two members of a family first came under his notice; during the period of observation and treatment, three of the other children of the same family, one sister and two brothers, all under twelve years, became affected.

Eames's Cases (*British Medical Journal*, December 21, 1872, p. 680).—A boy, aged nearly three years, was first affected; then the sister, aged fourteen; next the mother, and lastly another sister, aged eight. The children all slept in the same bed. The mother believed that the first child affected—thirteen months before—caught it from a woman who then lived with them, and had such spots on the face and hands.

Ferrier's Cases (*British Medical Journal*, December 21, 1872, p. 682).—A baby, aged nine months, with numerous growths on the lips, cheeks, and neck of five months' duration; the mother had two lesions on the left breast, which, as far as could be learned, came after those on the child's face had appeared. The disease was attributed to contagion from a little girl, the daughter of a neighbor, who had "warts" on the face and different parts of the body, and who used to frequent the house and kiss the baby.

Squire's Cases (*British Medical Journal*, January 13, 1872, p. 45).—Three cases occurring in the children of a family, and affecting all of them within a period of a few weeks.

Tilbury Fox's Cases (discussion, *British Medical Journal*, May 28, 1872, p. 538).—(a) One instance in which the mother's breast became affected with the disease while suckling her child who had some lesions on the forehead. (b) In another instance seven cases—seven children—in one family had been brought to him suffering from the affection.

Abelin's Cases (quoted by Retzius, *Deutsche Klinik*, 1872, p. 39).—(a) A girl, aged three, with lesions upon the face; another girl, about the same age, and with whom she played, soon developed the disease. (b) Another group of cases consisted of three children and their father.

Kaposi's Cases (*Vierteljahresschrift für Dermatologie und Syphilis*, 1877, p. 352).—Two of his own children; in the first child the tumors appeared after an attack of eczema, numerous lesions presenting; a few months after the growths had been removed, his four-year-old daughter developed the disease. His youngest child escaped.

G. H. Fox's Cases (*Chicago Medical Journal*, vol. xxxvi, 1878, p. 466).—(a) A girl, aged eight, with two lesions on the chin, who thinks she caught it from a little girl in the same house having five lesions, likewise on the chin. (b) Girl, aged four and a half, with several lesions near the eye, on the chin, cheek, and neck. Several months

before she had one near the right oral commissure; a sister, aged seven, had one at the same time in a similar location. (c) A boy, aged six months, with several lesions near the eye and on the scalp of two months' standing; a brother who had died a year before had the same disease; a little girl living in the same house has one lesion on the forehead. (d) A girl, aged six, with several tumors on the chin and the eyelid. Mother stated that she used to play with another girl who had "warts" on the hands; recently an older sister, aged fourteen, had four or five mollusca on the left cheek. (e) A girl, aged twelve, with several lesions on the chin and nose; a brother, aged seven, has one on the forehead; a child of a married sister had several around the eyes. This last child died seven or eight months before the others were affected. (f) A boy, aged seven, with one tumor on the nose of two months' standing; a little brother had some around the eyes about a year before; now a two-year-old baby has some "specks" under the eye. (g) A girl, aged one and a half, with numerous lesions on the face, chin, and neck; she lives next door to one of the other cases.

Smith's Cases (Dublin Journal of Medical Science, vol. lxvi, 1878, p. 371).—(a) A girl, aged two years and nine months, with lesions on the chin and one near the eye; a younger sister, aged sixteen months, soon afterward had two small tumors on the face and three on the chin; the father also contracted it, having several growths over the left eye. The disease could be traced to a boy of seventeen living in the same house. A little girl residing at that time in the same house had also a number of similar tumors. (b) A boy, aged two, with a dozen tumors on the neck; nine months later, a younger sister presented with similar growths.

Barnes's Cases (British Medical Journal, March 9, 1878, p. 335).—Had under his care an infant suckling aged eight months, the mother, the sister (aged seven), all of whom were affected with the disease. It first appeared in the girl, on her hands and face; she fondled and often cared for the baby, who caught it, by whom it was conveyed to the mother's breast; the father next caught it, having two tubercles under the left eye; and finally the brother contracted it, presumably from the baby.

Mackenzie's Cases (British Medical Journal, vol. i, 1879, p. 855).—(a) In the first series were a mother, four of her children, and an aunt. The disease began in her fourth child, by whom it was communicated to the baby's face; this latter conveyed it to the mother's breasts; the sixth child was next affected, and about the same time the fifth child also. The aunt, who frequently nursed and fondled the children,

caught it, having two lesions on her face. (b) Another group consisted of an infant, eighteen months old, with numerous lesions upon her face, and her mother with two mollusca on her breast. (c) In another instance two children living next door to each other presented the characteristic tubercles.

Morrant Baker's Cases (discussion, *British Medical Journal*, 1879, vol. i, p. 856).—Two or three instances in which the mother had molluscum contagiosum on the breast, and the child the same disease on the face.

Malcolm Morris's Cases (discussion, *British Medical Journal*, vol. i, 1879, p. 856).—A child with the disease, from whom an infant caught it, and by the latter communicated to its mother.

G. Brown's Cases (discussion, *British Medical Journal*, vol. i, 1879, p. 856).—Several instances, and in none was the infant affected without the mother's breast being also similarly diseased.

Allen's Cases (*Journal of Cutaneous and Genito-Urinary Diseases*, 1886, p. 239).—There came under his care a married woman, aged twenty-five, with a group of molluscum tumors on the right side of the neck, and a few scattered ones on the opposite side. They had first appeared seven months before, at a spot where her child (who had also had the disease) rested his face when she carried him. The child was examined and found to have still remaining upon his face a solitary molluscum. The mother stated that her small brother, who lived in the family, was similarly affected.

Havenith's Cases (*Journal de médecine de Bruxelles*, mars 5, 1887).—A woman with two lesions on the breast, and her infant, which she suckled, with a number of growths upon the face.

Tommasoli's Cases (*Monatshefte für praktische Dermatologie*, No. 4, 1890, p. 150).—(a) A four-year-old child passed some days with a family whose child, whom she was visiting, had some mollusca upon the face. After not less than twenty days she also showed mollusca upon the face. Some time after she had returned to her family from this visit her older brother contracted the disease. Before this visit neither had shown the slightest trace of the disease. (b) An infant had some tumors on its face; her mother, who was obliged to carry the child a great deal, also showed a lesion on one arm, and in the very place upon which the head of the child rested.

Mittendorf's Cases (*Transactions of the American Ophthalmological Society*, vol. 4, 1885–1887, p. 263).—Some of the children afflicted with molluscum contagiosum were taken from an institution where the disease was more or less epidemic (to be referred to later) and given out to a farmer, who boarded them. In a short time the affection had

spread to several of the children boarding at this farmer's place, to the child of the farmer, and likewise to his wife.

Stelwagon's—my own—Cases (Journal of Cutaneous and Genito-Urinary Diseases, 1889, p. 61).—The group consisted, according to the report then published, of three cases, all occurring in the same family. The affection first appeared in the daughter, a girl of twelve; shortly afterward the father of the girl developed a lesion on the neck, and about the same time the sister presented a characteristic tumor on the thigh. A few months subsequent to the published report, and about three or four months after the last of the three cases had been under notice, the mother presented herself with a typical lesion upon the eyelid.

Neumann's Cases (Archiv für Dermatologie und Syphilis, 1893, p. 980).—A group of cases consisting of a mother and twins—infants at the breast. The disease first began in one of the infants, who communicated it to the mother's breast, and by the latter was subsequently conveyed to the other child.

2. CLINICAL EXAMPLES OF ITS SPREAD IN ASYLUMS, SCHOOLS, HOSPITALS, ETC.

Caillaull's Cases (Traité pratique des maladies de la peau chez les enfants, Paris, 1859, p. 94).—A girl, aged eight, was admitted in the hospital ward with numerous tumors on face, eyelids, and shoulders. Out of thirty children in the same ward fourteen became finally affected. He watched the cases, and was able to affirm that no new examples from without entered the ward.

Ebert's Cases (Jahrbuch für Kinderheilkunde, vol. iii, 1870, p. 152).—A girl, aged fourteen, was admitted in the hospital with a number of tumors on the face. The disease spread to three children who occupied the nearest beds, and who came more particularly in contact with the patient and with each other.

Living's Cases (Lancet, vol. ii, 1878, p. 495).—The cases, nine in all, were observed in a school. Within a few months after the first case was noticed eight others had become affected.

Mittendorf's Cases (loc. cit.).—(a) One epidemic was observed at a "home for children." The disease was introduced by a little girl who had a few lesions on the eyelids, which were noticed by the attendant at the time of her admission. No attention was paid to the matter, but within a few weeks several of the other girls developed similar lesions. At the time of the professional visit to the institution, which was about three months after the admission of the original patient, it

was found that twenty-seven children were more or less disfigured by molluscum tumors. (b) Another epidemic, observed by this writer, occurred at a "nursery and child's hospital." Within two years after the first case had been observed forty-one of the children had become affected.

Allen's Cases (Journal of Cutaneous and Genito-Urinary Diseases, 1886, p. 239).—(a) A case of the disease was admitted into a children's asylum with a few lesions upon the face. In the course of a few months it was noted that many others of the children were affected. In all there were forty-two cases at the time of the professional visit. Under treatment these cases recovered; but on a subsequent visit, three months later, it was observed that in twelve of the cases the disease had recurred, and that there had developed five new cases—making a total, recurrences excepted, of forty-seven cases. (b) This same observer had under his care another epidemic (*New York Medical Record, August 3, 1889, p. 116*) in another children's asylum. A little girl was brought in with some characteristic tumors on her face; a boy with whom she caressed and played soon developed the growths, and from these two cases of the disease five others developed.

Stelwagon's—my own—Cases (Journal of Cutaneous and Genito-Urinary Diseases, 1889, p. 60).—(a) The first series, numbering four cases, came under notice at a children's hospital. The disease was first seen in one of the crippled inmates, and soon afterward three others among his fellows in the same ward were observed. (b) The second series occurred in a "home for children." There were thirteen cases in all, among about one hundred children. It had been introduced by one of the inmates and subsequently spread to the others. (c) The third series occurred also in the last-named institution about a year later, the former cases all having been cured. It consisted of twelve cases, and in this instance was apparently traceable to a recent admission of two cases.

Tommasoli's Cases (loc. cit.).—In one asylum in the city of Sienna were found fifty-six children with molluscum contagiosum; in three other asylums in the same city not a single case was discovered.

Jackson's Cases (Journal of Cutaneous and Genito-Urinary Diseases, 1891, p. 338).—A small epidemic was observed in a children's pavilion of a hospital. One week after the first case came under observation two more cases had developed; a week later another new case, and the following week two additional cases, making six in all. While the patients did not sleep in the same pavilion, they all played together.

Graham's Cases (Journal of Cutaneous and Genito-Urinary Diseases, 1892, p. 89).—In an “infant’s home” a little girl was brought in who was noticed to have small mollusca on the face and neck. During the first three months the child was in the infirmary; she was then transferred with several others to one of the nurseries of the institution which accommodates about twenty children. Two months later four of the inmates of this nursery were found to be affected; of these one was brought over with the original patient from the infirmary. The growths were removed by the ordinary plans of treatment; but from that time till the present—in all a period of three or four years—the disease had existed in that nursery. At present there are three cases. In all, the observation covered fifteen cases. The disease has never extended beyond this one nursery; there is very little communication between the various nurseries.

3. EXAMPLES OF ACCIDENTAL INOCULATION.

Wigglesworth records (discussion, *Transactions of the American Dermatological Association*, 1891, p. 63) himself as an example of accidental inoculation, several lesions appearing on the hand and forearm a few weeks after he had squeezed out molluscum tumors in a case coming under his care.

Allen relates (*Transactions of the American Dermatological Association*, 1891, p. 62), (a) the case of a man who came to him with a little molluscum tumor on the thumb, with the statement that a few weeks before he had squeezed out, with the thumbs, similar small tumors around the eyelids of his own child.

(b) This same observer also records (*New York Medical Record*, 1889, p. 117, August 3d) the following: A New York physician came to him, knowing him to be interested in the subject, with a molluscum tumor on the fourth finger; this gentleman was an ophthalmic surgeon to one of the large asylums where molluscum contagiosum had been epidemic and had of late removed many such growths from the faces of his little patients.

(c) *Allen* himself has recently been, as he has kindly communicated to me by letter under date of April 12, 1894, the recipient of an accidental inoculation, as follows: “My experimental attempts I must look upon as failures, though I have since been the recipient of an accidental inoculation on the left forefinger just over the knuckle, resulting in two distinct growths. I had been treating several cases during the few months preceding, the last case two or three weeks before. After they were big enough to attract my attention (mere

specks) it took them six weeks to attain a size from which a clinical diagnosis could be made."

Brocq, in a letter under date of May 20, 1894, details an accidental inoculation of himself as follows: "I inoculated myself involuntarily with molluscum, with my nails, after having pressed out, with the nails of the two thumbs, the contents of a lesion of molluscum in a patient. Soon afterward I inadvertently scratched my face. About a month and a half later several lesions of molluscum developed in this region."

4. SUCCESSFUL EXPERIMENTAL INOCULATION.

Retzius (*Deutsche Klinik*, 1872, p. 39) reports a successful inoculation upon himself: A small quantity of the molluscum material was rubbed into a limited area of the upper breast, over which he fixed, by means of adhesive strips, a watch glass; this protecting cover was worn for a few weeks. Two months later nothing had developed, but between four and five months after the inoculation there gradually developed a pinhead-sized lesion. He watched it for three months, during which time it grew a trifle larger; it then gradually disappeared. It had all the clinical appearances of a small typical molluscum contagiosum tumor, and the various microscopic examinations of the pressed-out contents were corroborative.

Paterson states, in a letter to Dr. Duckworth (quoted in Duckworth's paper, *St. Bartholomew's Hospital Reports*, vol. viii, p. 64, 1872), that his later inoculations had succeeded, the conditions being that the contents of the tumors were inserted into the mouths of the follicles in a tender part of the skin, such as the angles of the mouth, axillæ, mammæ, etc.

Vidal records (*Le Progrès médical*, 1878, p. 478) the successful inoculation of the disease made by Dr. Pautry, one of his assistants, a positive result showing itself three months after the date of inoculation.*

Stanziale's experimental inoculations (*Giornale Internazionale delle Scienze Mediche*, 1890, p. 321) had one successful result. The

* The details not being given in this report and not being able to find any other record, I wrote Dr. Brocq as to his knowledge of the particulars, who kindly replied as follows: "A flattened pointed instrument was inserted into a lesion of molluscum and moved to and fro a few times. With this the upper third of the arm in the subject selected was punctured in four places quite near each other, to the depth of about a half millimetre. A small mark from these punctures remained, and three months later the lesions of molluscum were noticed. In the notes it is not stated whether the subject had had molluscum previously." It is doubtless this successful case (an infant's or child's arm), that is shown in model No. 515 in the Baretta Museum.

substance of the molluscum was rubbed into the sound skin of the inside of the forearm and arm of a woman aged twenty-six; three months later a hempseed-sized lesion had developed, which in the course of forty days more had grown to the size of a small pea.

Pick, of Prague, also succeeded (*Monatshefte für praktische Dermatologie*, vol. xv, 1892, p. 133; and *British Journal of Dermatology*, 1892, p. 233) in producing the disease by inoculation. The inoculations were made in a boy aged eleven and a girl aged nine; the region selected was the skin over Scarpa's triangle. After thoroughly asepticizing the part, twelve inoculations were made just within the epidermis, and the exact location marked by ringing with nitrate of silver. It was not until the tenth week that the lesions began to develop. The contents of the little tumors which developed showed under the microscope the characteristic molluscum corpuscles. At the end of the twelfth week the growths were excised, and were found to correspond microscopically to molluscum growths. Nine of the twelve inoculation succeeded.

Haab succeeded (*Correspondenzblatt für Aerzte*, No. 8, 1886) in inoculating himself. He rubbed the contents from a freshly extirpated lesion into the skin of his forearm. Nothing was noticed till more than six months had passed, when a characteristic tumor of about the size of a hempseed developed, corresponding clinically and microscopically to a typical molluscum growth.

Nobel records (*Archiv für Dermatologie und Syphilis*, 1893, p. 929) a favorable result from experimental inoculation. It was done, however, on a subject who had the disease on the genitalia. The skin of the arm in the selected spot was scraped of its uppermost layer, the inoculating material from one of the lesions on the penis rubbed in, and the part bound with silk. After four weeks punctate elevations were noticeable, but it was not till nine weeks after the date of inoculation that the characteristic tumors were to be seen.*

This constitutes the greater part of the affirmative evidence which has been accumulating for some years, and which, as stated in the preliminary part of this paper, can lead to but one conclusion—the

* Crocker mentions (*Diseases of the Skin*, 2d edition, p. 480) among others a successful inoculation by "Horab." In reply to a letter regarding the record of this case, which I had not been able to discover, Dr. Crocker kindly replied that after a careful search he could as yet only find it referred to in the *Journal des maladies cutanées et syphilitiques* of 1891, page 134, in an abstract of a thesis (Paris, 1889) by M. Moreau. In this abstract, which I have since consulted, the name only is given, no details being stated, and a fairly thorough examination has failed to disclose any other record of the case. It is possible, as Dr. Crocker also suggests, that it may in reality be "Haab's" case in a misspelled guise; an examination of Moreau's paper in the original would doubtless clear up the matter.

contagiousness of the disease. The clinical evidence alone is indeed overwhelming, and, unless we are to place an interpretation upon the clinical facts of this disease different from that which we are accustomed to place upon those of other contagious skin diseases, is in itself convincing. Supporting and confirming the clinical side of the question, however, is the success in the cited examples of experimental inoculation, and also the several instances of accidental inoculation referred to. In a careful or even superficial survey of the subject one point presents itself at times boldly—that is, the variable and often long period of incubation. This is for obvious reasons more conspicuously shown in the cases of experimental inoculation, but the same is recognized in a study of the ordinary clinical cases. It is probable that the difficulty in tracing the source of contagion in some instances is due to this very fact; and this also complicates the investigation of the disease by experimental inoculation. As yet from the material at hand the proper method of artificial inoculation can not be definitely stated; there was, in fact, little or no uniformity in the methods employed in the successful instances recorded.* Indeed, until we know the character of the parasite, its mode of entrance, its life habits, etc., very little progress in this direction is to be expected. Of the various parasites alleged to be the cause of the disease, the psorosperm is or was the most promising, but the elaborate investigations by Török and Tommasoli, and also those by Piffard and others, would seem to throw great doubt upon this point. That the disease is parasitic, and that the parasite will be sooner or later recognized, however, no one can question.

* In the numerous unsuccessful attempts at experimental inoculation which have been made from time to time by various investigators different methods were often purposely tried by the same experimenter. In my own attempts the material of both the contents and body of the molluscan tumors, and from recent and advanced lesions, were variously employed; in some instances rubbed in, in others gently rubbed in after removing the outermost layers of the epiderm, in others were pricked in as in tattooing, and in one or two instances introduced just beneath the epidermic covering. All were unsuccessful; in a few experiments minute papules were to be seen for a few days after the inoculation, but these were apparently of a purely inflammatory nature, presenting nothing characteristic, and disappearing rapidly.

TWO CASES OF SYPHILIS HAVING A BEARING ON THE
QUESTION OF THE PERIOD DURING WHICH THE
DISEASE IS COMMUNICABLE.

BY JAMES BELL, M. D.,

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Victoria Hospital and Consulting Surgeon to the Montreal General Hospital.

THIS communication is merely a report of facts which I have had the opportunity of observing under such exceptional circumstances as to lead me to the conclusion that they may be accepted as absolutely reliable, and of such a nature as to add to our knowledge of some of the more obscure problems presented by this protean disease.

They are as follows: 1. A case of transmission of syphilis from the male two years after the disappearance of all lesions.

A gentleman well known to me for years socially as well as professionally, a healthy, strong, active, and athletic man with a good family history, aged about thirty years—a club man, and what might be called a high liver, although rather abstemious in the matter of alcoholic beverages—presented himself on the 3d of March, 1886, with a well-marked and characteristic primary sore. I had previously treated him occasionally for slight attacks of eczema, sometimes on the forearms and sometimes on the legs, but never severe or persistent. I frankly stated my diagnosis, told him what he had to expect in the way of prolonged treatment, and encouraged him with a favorable prognosis. I advised total abstinence from alcohol and tobacco, and regular but good living. I gave no medicine, but instructed him to present himself once a week for examination. On the 9th of June he presented himself with the typical skin, glandular, and throat symptoms, and treatment was then begun. The treatment was at first hydrargyrum cum creta three times daily, which after about three weeks was replaced by protiodide of mercury pills, beginning with a quarter of a grain three times a day and increasing it up to half a grain within a few weeks. This was continued for some months, then a period of mixed treatment—perchloride of mercury and iodide of potassium ; then a lull of a month or six weeks and a course of inunctions to the point of commencing salivation ; then a rest of a month ; then some iodide treatment, and finally a return to the protiodide pills, half a grain three times daily. This whole course of treatment extended over two years and four months, during which he abstained

entirely from alcohol and followed out my instructions to the letter. After the first three months of treatment he never had a sign of the disease, his general health remained good throughout, and he frequently declared to me that he never felt better in his life. About the time of coming under treatment he was either engaged or about to become engaged to be married. As his treatment progressed satisfactorily, he became anxious to be married; but I resolutely refused to sanction matrimony within two years and a half of the onset of the disease, and then only with the proviso that he should remain perfectly free for at least six months prior to making his final arrangements. At the end of August, 1888, I fully and unreservedly advised him that he might safely arrange to be married. Outside considerations hurried on the arrangements more rapidly than I had anticipated, and he was married on the 24th of November, 1888—two years and eight months from the time at which I diagnosed a fully developed chancre and two years and six months from the time of commencing the treatment. During the month of October he indulged in certain festivities in the way of dinners and suppers and champagne, incident to his emancipation from treatment and in connection with his forthcoming marriage, and (as I believe) in consequence presented himself again with a few patches of acute eczema identical in every respect with his presyphilitic attacks. This soon got well, and I saw no more of him until he came to consult me about his wife. As I have already said, he was married on the 24th of November. On the 25th of January, 1889, he came to me to consult me about some swollen and painful condition of his wife's genitals, but as I had gone abroad for a couple of months he took her to another medical man, and, filled with remorse as he was, told him the history of his own illness. A diagnosis of primary syphilis was made, and a month later (so I am informed by the gentleman who treated her) a characteristic rash appeared, and she was treated with protiodide pills and suitable local applications. Immediately on my return he came to see me, but I could not believe it possible that he could have inoculated her. On the 4th of April I saw her for the first time. She was a strong and healthy woman, but came of a scrofulous family and had had one tonsil removed when a child for hypertrophy. The protiodide treatment had been discontinued and she had about half a dozen raised pustular spots about the neck and shoulders and one very suspicious-looking spot as large as a ten-cent piece in the fold behind the tragus of the ear. This was moist and excoriated and was very suggestive-looking. The superficial cervical glands were all enlarged, and the tonsils and pillars of the fauces swollen and angry-looking. I declined to make a diagnosis in the

face of these observations and facts, for the reason that I believed it impossible that inoculation could have taken place. I gave a placebo, and she went away to the country, but returned in about a fortnight with a deeply ulcerated tonsil and a general redness and inflammation of the fauces and pharynx. The skin eruption had greatly increased and was now multiform, though consisting chiefly of isolated pustular spots. I now made the diagnosis of syphilis (in May), and on suitable treatment all these signs soon disappeared. I may say that in order not to excite suspicion no examination of the genital or inguinal regions had been suggested, and as the patient had had no sufficient reason given her to think it necessary to continue her treatment it was dropped as soon as the symptoms disappeared, with the result that in August she again appeared with a characteristic iritis.

I have given in this narrative the fullest details in order to show (1) that the husband was properly treated and was, as far as could be seen, free from disease when he married; and (2) that there can be no doubt as to the diagnosis in the case of the wife. For the rest, I believe the husband to have been perfectly honest in the matter, and the wife to have been in every respect above suspicion. In my opinion, this must have been a case of blood inoculation.

2. Conception occurring during the period of incubation of the chancre in the male parent—the product being a perfectly healthy, nonsyphilitic child.

A. B., a strong, active, and healthy man, thirty years of age, had been under my care in the early part of the summer of 1892 for a chronic urethritis from which he fully recovered. On the 4th of November he came to me in a state of great anxiety. His wedding day was fixed for the 7th of November, and he was leaving town that evening for the city in which he was to be married. The cause of his anxiety was, he stated to me, the fact that four days previously (October 31st), after a prenuptial dinner which had been tendered him, and while semi-intoxicated, he had again exposed himself, and was in mortal dread lest the urethritis should be revived. This fear completely blinded him to the possibility of any other danger. I next saw him on the 16th of January, 1893, when he came to me with a fully developed secondary syphilis and a large indurated chancre. He had not the slightest suspicion of what was the matter. The sore, which had appeared two or three weeks after marriage, he attributed to a tear of the prepuce, and its subsequent induration to neglect and the irritation of repeated coitus. The skin eruption, which had been developing for about a week when I saw him (during which he had been away on a business trip), was the first thing to excite his apprehension. It is not

necessary to follow the history of this patient further. The interest of the case is centered in his wife and child.

Careful investigation elicited the following facts concerning his wife: (1) That she had ceased to menstruate one week before marriage and had not menstruated since; (2) that she was then suffering from morning vomiting and other symptoms which led her to believe that she was pregnant (about two months). Subsequent events proved this to be the case, and her child was born about the middle of August. Conception must therefore have occurred during the interval which elapsed between the inoculation and the appearance of the chancre. It is only necessary to say further that the woman was made aware of the grave condition of affairs by the husband, and willingly submitted herself to careful examination from time to time during her pregnancy (the genitals always excepted), and that at no time up to the present has there been any indication of syphilis. From the time of the discovery of the husband's disease up to the time of delivery she took steadily protiodide of mercury (in pill form), from three quarters of a grain to a grain and a half daily. She remained in good health, and was delivered at full time of a fine, healthy child, which she nursed for about six months, when her milk failed and she was obliged to wean it. The child (now nine months old) has never shown a sign of syphilis, and is a typically healthy, well-nourished baby.

I regret that I have not had the time nor the opportunity to review the literature of syphilis—now so very extensive—with a view of classifying facts similar to those here recorded, but I trust that these cases may be considered of sufficient interest to justify me in bringing them before the association.

NÆVUS LIPOMATODES: A REPORT OF A CASE.

By GEORGE THOMAS JACKSON, M. D.,

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DR. ISABELLE DELANY very kindly brought to my clinic at the Woman's Medical College the little Italian child whose picture accompanies this article. The child is about four years old. As the parents were unable to speak English and there was no interpreter, nothing could be ascertained in regard to the history of the case beyond the fact that the growth was congenital. The distribution of the nævus is well shown in the picture, and is remarkable

not only for its extent but also for the fact that on the scalp were two distinct patches of baldness. (See cut.) These were not complete, but had in them some straggling hairs. They were slightly elevated and felt soft. They were divided by a narrow line of hair. In my experience such patches are unique.



Upon the face and neck the growth bore a disagreeable resemblance to a brownish-black snake, and as the child moved its head up and down it seemed to undulate like the skin of a snake in rapid motion. The whole mass was elevated, soft and velvety to the touch, with a finely uneven surface, somewhat like the pile of a silk rug; or between that and the papillary appearance of a wart. It ended abruptly at the middle line of the neck. Below its lower border and upon the upper part of the chest there were two small nævi of the same character, that reminded one forcibly of a pendant to a necklace.

We are by no means clear as to the ætiology of nævi, but they are probably due to nerve influence. If the nævus in this case is compared

with the picture of the distribution of the facial nerve and its anastomoses as shown in Gray's *Anatomy*, it will be seen that the two correspond nearly enough to suggest a causal connection between that nerve and the nævus. The correspondence is quite as close as that so often seen in facial zoster.

For ordinary nævi, whether vascular, pigmentary, or fibrous, electrolysis offers an efficient means of treatment. In so large a growth as the one here depicted this agent could not be used to advantage. The best means of treatment is excision with the knife. In places skin grafting would have to be employed. It would be useless to operate on the scalp, because we would have a cicatrix left that would be no better æsthetically than the nævus; besides, the hair can easily be brushed so as to cover the growths entirely.

14 East Thirty-first Street.

AN APPARATUS FOR WARMING AND STERILIZING INJECTIONS.

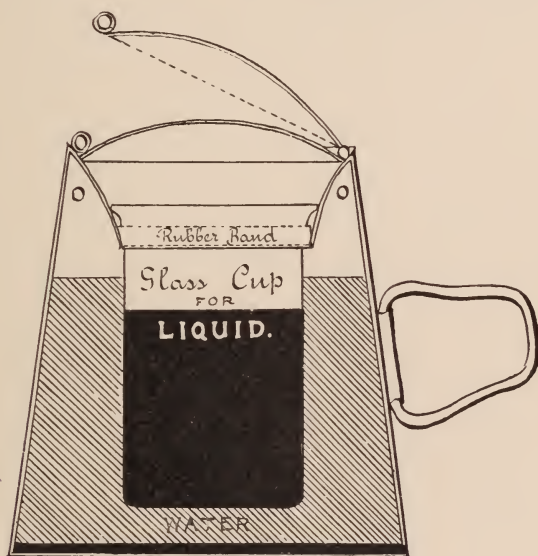
By FRED. J. LEVISEUR, M. D.

THE beneficial action of warm injections in the treatment of gonorrhœa is universally acknowledged. Warm solutions soak more easily into the epithelial layer of the mucous membrane; they are less irritating, and consequently not likely to produce reflex contractions of the muscular parts of the urethra. In many cases they even overcome the resistance of the cut-off muscle and enter the bladder, provided that they are injected in sufficient quantity and under a steady pressure. The reasons why warm injections have not become more popular are the desire of the patients to keep their disease secret and the tendency to regard gonorrhœa as a trifling affection, in the treatment of which it is deemed unnecessary to waste much time and trouble. In spite of the advances of modern science, both this foolish prejudice and this pernicious notion still prevail and compel the physician in a great many instances to stick to the old routine treatment—much against his wish. Still there are patients (and their number is growing) who, either more cautious by nature or made heedful by experience, are willing to devote the proper time and care to the treatment of their ailment and leave the hands of the physician free to act regardless of minor considerations.

The procedure of warming a solution is not as easy as may be imagined. One has to pour some of the solution into a glass tube or a dish and then heat it over a flame, or one has to immerse the whole

bottle each time into hot water. In the first instance much of the water will evaporate and the strength of the solution will be greatly increased. In the second instance the label will fall off and the cork will drop out of the bottle and water will enter into the latter. Besides, repeated warming will again result in gradually changing the concentration of the solution. Several vessels, an alcohol lamp, or very hot water are required.

With the kind aid of Mr. M. J. Breitenbach, druggist at 591 Madison Avenue, New York, I have constructed a small apparatus which is to be given to the patient. The accompanying illustration shows



Cross Section

its construction. It is cone-shaped, two inches and three quarters high, two inches and a half in diameter at the top and three inches at the bottom, and holds about seven ounces of water. The kettle is half filled with water, some of the solution poured into the glass cup, and the latter inserted into the opening provided for it. The rubber band around the glass cup keeps it tightly in position, prevents it from cracking, and keeps the steam from coming in contact with the solution. The steam escapes directly from the kettle through a number of holes near the rim. The apparatus can also be used for sterilizing subcutaneous and intramuscular injection fluids or small instruments, as hypodermic needles, scarification and vaccination lancets, etc.

Hoffman Arms, 640 Madison Avenue, New York.

Society Transactions.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY : STATED MEETING, HELD ON TUESDAY EVENING, DECEMBER 11, 1894.

DR. R. W. TAYLOR *in the Chair*.

A Case of Urethro-Rectal Fistula.—Presented by DR. F. TILDEN BROWN.

The patient was a male, aged twenty-seven years, single, a native of the United States. Between the ages of seventeen and twenty-four he had several attacks of gonorrhoea, but none for three years previous to the occurrence of the prostatic abscess which originated the urethro-rectal fistula. According to the statement made by the patient, the origin of this was rather peculiar. He states that one night in October, 1891, while half awake, he became conscious of an impending seminal emission, and in order to check it he seized the penis and pressed it firmly; this resulted in a prostatic abscess, which was opened in February, 1892, and a urethro-rectal fistula produced. Five months later, while in San Francisco, an unsuccessful operation was performed for the cure of the fistula; several other attempts were made to close the fistula, which were equally unsuccessful. In all these operations the bladder was drained through a suprapubic opening. On August 15, 1894, the man came to New York, and was admitted to the Presbyterian Hospital. It was found that he had become addicted to the use of morphine, and three weeks were required to reduce his excesses in this direction and study his case. On examination it was found that the fistulous tract extended from the prostatic region of the urethra to the rectum, its rectal exit being just above the internal sphincter. The opening was sufficiently large to admit the index finger. Two strictures of the urethra were also found; these were divided, and the canal enlarged to a uniform caliber of 32 F. An operation for the cure of the fistula was then performed. A perineal opening was first made, after which the opening in the rectum was closed. This was accomplished with considerable difficulty, as the tissues surrounding the fistulous opening had become so much thinned that it appeared very doubtful whether the sutures would hold. After closing the opening, the mucous membrane of the rectal wall was dissected up and brought down over the line of sutures like an apron, so as to act as a temporary shield. A large perineal tube was then inserted and the bowels confined. On account of the great loss of tissue sustained during the previous operations, the final outcome of the operation was regarded as very dubious; but the rectal fistula closed entirely, and the patient made a perfectly good recovery.

DR. FULLER referred to a case of urethro-rectal fistula recently reported in which the fistula was cured without opening the urethra at all.

DR. DEBOUT-D'ESTRÉES, of Contrexéville, France, exhibited a number of vesical calculi which had become fractured in the bladder and expelled by natural force.

Further Experience in the Effect of Simultaneous Ligation of both Internal Iliac Arteries for Hypertrophy of the Prostate Gland.—DR. WILLY MEYER read a paper with this title. He stated that this method of reducing the size of the enlarged prostate was first introduced by Dr. Bier, of Kiel, whose experience with the operation was published in the *Wiener klinische Wochenschrift*, August 10, 1893.

Up to the present time, Dr. Meyer has performed the operation three times. The first one, which was performed on October 5, 1893, was reported in the July (1894) number of the *Annals of Surgery*. In that case, several days after the operation, there was secondary hæmorrhage due to pressure necrosis of the external iliac artery, which necessitated tying off the common iliac. Soon after this, gangrene of the toes and part of the metatarsus developed on one side, which later on required amputation of the anterior portion of the foot. So far as the effect of the operation on the prostate was concerned, the result was very satisfactory. Twelve hours after the operation the patient began to pass his urine voluntarily in a very thin stream, and during the following two weeks he frequently voided small quantities through the urethra, but he also had to be catheterized. The improvement gradually continued, and he is at present able to hold his urine for two hours and then pass ten or twelve ounces in a forcible stream.

The second case was operated on May 21, 1894. The patient was a man aged sixty-three years, who suffered from retention of urine due to hypertrophy of the prostate. A single silk ligature was placed around each internal iliac artery within its sheath and tied. The two wounds were then sutured with catgut, layer by layer. There was no reaction after the operation, and the wounds healed by primary union. During the night following the operation the patient voided his urine a number of times in a fine stream. Retention did not again set in. On the fifth day he suddenly developed sub-normal temperature without any apparent cause, and died in a comatose condition on the eighth day.

In the third case reported only the left internal iliac was successfully tied, and this was followed by decided atrophy of the corresponding side of the prostate gland.

Dr. Meyer said he will continue doing this operation in suitable cases, namely, patients with "recent" retention, where marked dilatation with atony of the bladder has not yet set in. The operation is not at all difficult if the patient is placed in the Trendelenburg posture, and the artery can be tied on both sides within one hour. In tying it he employs silk, one ligature being sufficient, after having opened the sheath of the artery. The wound should be closed entirely by means of buried sutures. The operation should be an extraperitoneal one.

In conclusion, Dr. Meyer said that if further observations prove equally satisfactory in regard to the final result of simultaneous ligation of the internal iliacs, this must necessarily become the standard radical operation for hypertrophy of the prostate. It leaves the parts in their normal anatomical relation, and removes the obstruction in the simplest way—i. e., by producing progressive atrophy of the organ which causes the obstruction. It also keeps the patient in bed for only ten to fourteen days, the wounds healing by primary union under the first dressing.

DR. SAMUEL ALEXANDER expressed the opinion that in patients with athe-

romatous arteries, tying off the internal iliacs might cause dangerous secondary hæmorrhage. While cutting off the blood supply in this way tends to produce atrophy of the prostate, still he thought the operation, for the present at least, should be presented to the patient, not as a recognized surgical procedure, but as a physiological and surgical experiment.

DR. FULLER said he agreed with the views expressed by Dr. Alexander. In most of these old patients with enlarged prostate there is a condition of general arterial sclerosis, and by cutting off so large a portion of the blood supply of the lower extremities gangrene might be produced.

DR. C. W. ALLEN said that the operation of simultaneous ligation of both internal iliacs for the relief of a hypertrophied prostate is certainly a fascinating one, both for the surgeon and the patient. If further experiments show that its performance is not followed by gangrene or other untoward results, he saw no reason why the operation should not take its place among other well-recognized surgical procedures.

DR. MEYER, in closing the discussion, said that the recent investigations of Bier have shown that arterial sclerosis is not of very frequent occurrence. The danger of secondary hæmorrhage is slight. While the operation must still be regarded as an experiment, still, all operations when first undertaken were experiments. The gangrene of the foot which occurred in one of the cases reported in the paper was not due to tying off the internal iliacs; in that case the common iliac was tied. In the future he would not perform the operation on patients over the age of sixty. It is, of course, not applicable to all cases; some patients with hypertrophy of the prostate must be relieved in one way, others in another.

DR. R. GUTERAS exhibited a small plug which he stated he has found very serviceable in cases where the catheter is left *in situ* for longer or shorter periods. It is inserted into the outer end of the catheter, and prevents the dribbling of urine. The plug, which is made by Tiemann, is graduated so as to fit almost any sized catheter.

Extreme Local Dilatation in the Treatment of Urethral Stricture and its Allied Conditions.—By DR. J. P. TUTTLE.

This paper, the author said, was supplementary to one read before the American Association of Genito-Urinary Surgeons in 1891 (*N. Y. Med. Jour.*, October 3, 1891) in which he laid down the principles upon which this method of treatment is based, and stated that he had found, as a result of examinations of a considerable number of urethræ in cadavers, the following:

(1) A lessening in caliber of the membranous urethra compared with that of the prostatic, averaging three millimetres.

(2) A constriction at the anterior border of the bulbous portion, at about the point of attachment of the suspensory ligament, averaging nearly four millimetres.

(3) A constriction of from one to three millimetres at the posterior border of the fossa navicularis, which, although not always present, was found in the large majority of cases.

(4) The urethra could be distended at all points excepting the meatus to No. 50 F. without rupture.

(5) A dilatation at the fossa navicularis was present in every case.

(6) The size of the meatus bears no regular proportion to that of the urethra.

These observations were made upon healthy urethræ, so far as could be discerned by dissection, and therefore we may conclude that these constrictions and dilatations are normal. Their existence, the author said, should be constantly borne in mind and the normal conformation of the parts should be conserved, so far as is consistent with the good of our patients.

The cure of stricture by gradual dilatation is based upon the assumption that a retrograde metamorphosis is set up in the connective tissue, which causes its atrophy or absorption, and the coarctation is thus removed. If this is true, and if it is the dilatation that cures in internal urethrotomy, local dilatation at the strictured part ought to accomplish the same result without mutilation of the rest of the urethra. With this in view Dr. Tuttle devised the urethral dilator, which he described in the paper above referred to. The special points of interest in connection with the instrument are its parallel separation over a limited space, its powerful mechanism, its applicability to all portions of the urethra, and its rubber cap, which protects the mucous membrane from the edges of the metallic bars, and prevents pinching when the bars are closed. After three more years of use, Dr. Tuttle said he finds no reason to alter the favorable opinion then expressed regarding the instrument, and he feels justified in commending it to the profession in this supplementary report. While the instrument may appear to some as a divulsor, the author said he disclaims for it any such intention; very gradual dilatation has given him his best results. He seldom increases the distention more than two or three millimetres at a *séance*, and the operation is repeated after an interval of from three to ten days. The rubber cap should be taken off immediately after using the instrument, and kept in a solution of bichloride of mercury.

Dr. Tuttle then reported a series of twenty-five cases successfully treated by this method since 1891; of the thirty-five cases reported at that time, he has examined eighteen within the past six months, and in only two of these was there any sign of a return of the stricture; and these, as his notes showed, had been under treatment only three and two weeks, respectively. The average time required for treatment is over six weeks.

In all these cases the use of the instrument has been supplemented by the rational and accepted methods of treatment in these affections, such as hot water, boric acid, and permanganate of potash irrigations, deep instillations of silver nitrate, sulphate of zinc, etc., and the local application of remedial agents through the endoscope and urethral speculum where necessary. The dilator simply takes the place of sounds and the urethrotome.

DR. ALLEN said he regarded Dr. Tuttle's instrument as a very good one; it has a certain field of utility, especially in those patients who object to cutting operations.

DR. GUITERAS said he was in favor of dilatation, and for this purpose he has employed Oberlaender's dilator, which is really a modification of the Otis urethrotome, and which is on a similar principle to this instrument.

DR. H. G. KLOTZ said he has obtained very good results with Oberlaender's instrument; in old cicatricial strictures, however, dilatation does not have much effect. Dr. Tuttle's instrument seems to possess some advantage over the Oberlaender dilator.

DR. GUITERAS said that in old cartilaginous strictures he believes in cutting operations.

DR. R. W. TAYLOR said that instruments like the one shown by Dr. Tuttle, if used prudently, may do good in some cases. There has been of late years—less now than formerly—a tendency to use large instruments in the urethra, and this practice can not but be regarded as reprehensible; many instances have come under his observation in which the damage thus done has produced an incurable urethral discharge. In many cases of stricture a slight incision followed by dilatation will produce very satisfactory results. For this purpose Civiale's urethrotome is well adapted. In well-selected cases, instruments like the one exhibited are of value, but their field of usefulness is necessarily restricted.

DR. TUTTLE, in closing the discussion, said he agreed with Dr. Taylor that treatment with an instrument of this kind is only applicable to certain cases. He does not agree with him, however, that the instrument is a very dangerous one. He has employed it in over one hundred cases, and has never seen any untoward symptoms of any kind follow its use, such as he has often seen after internal urethrotomy.

THE NEW YORK DERMATOLOGICAL SOCIETY.

237TH REGULAR MEETING, HELD ON TUESDAY EVENING, OCTOBER 23, 1894.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Prurigo Mitis.—Presented by DR. S. SHERWELL.

The patient was a girl aged eleven years. She has suffered from the disease since infancy, although during the past two or three years it has been growing worse. It is worse in summer than in winter.

DR. E. B. BRONSON said he also regarded the case as one of prurigo, although it is not of the mildest form. The eczematous lesions present are probably purely the result of scratching.

DR. S. LUSTGARTEN said the case possesses most of the clinical features of Hebra's prurigo, except the exacerbations in summer, the absence of thickening of the skin, and the comparatively late beginning—*i. e.*, after the child has reached the age of three years. It might be a case of chronic papular urticaria, which in its present stage it is impossible to distinguish from prurigo. The latter he has been inclined to regard as an incurable disease. He has seen cases similar to this one where the disease lasted several years and then disappeared. Whether the case is one of true prurigo or is simply an urticaria longer observation alone will prove.

DR. KLOTZ said he regarded the case as one of prurigo. In a case which was recently under his observation the patient complained that the symptoms were aggravated during the warm weather. In chronic urticaria the patients are subject to acute attacks, which seem to be absent in this case.

DR. SHERWELL, in closing the discussion, said that in this mild form of prurigo the diagnosis is much more difficult than it is in the more severe types, of which he has seen a number of examples. There is always a certain amount of papular eczema in these cases, the treatment of which moderates the severity of the prurigo, but does not cure it.

A Case of Hyper-pigmentation of the Skin.—Presented by DR. LUSTGARTEN.

The patient was a young girl with areas of hyper-pigmentation covering the left side of the forehead and the eyelids and conjunctiva of the left eye. There is also a small patch on the right temple. The pigmented spots are grayish or graphite in color. They first made their appearance about three years ago, and have been gradually extending. The first impression was that the case was one of argyria, but according to her history she has never been treated with silver externally or internally, nor has she used it in her work. During the past six months she has had some stomach symptoms.

DR. A. R. ROBINSON said that about seven years ago he described a case in which patches of hyper-pigmentation appeared on the face very similar to these. It had existed about three years when he first saw it. The affection, which was first confined to the skin, gradually extended to the mucous membrane and assumed a malignant type. He has since lost sight of the patient, but recently heard that she is now confined to her room, and that a fatal termination is expected.

DR. BRONSON called attention to the fact that the discoloration in this case is bluish, and very distinct from the brownish pigmentation seen in chloasma.

DR. SHERWELL said that in a number of cases of melanosarcoma of the eye which have come under his observation, the disease generally first made its appearance in the sclerotic coat, which is involved in this case, or in the uveal membrane, and there is always a certain amount of elevation of the affected regions, due to the deposits there.

DR. LUSTGARTEN said he was inclined to agree with Dr. Robinson that the case would eventually prove to be one of sarcoma. It resembles the hæmorrhagic sarcoma of Kaposi. In reply to Dr. Klotz, who suggested that the lesion might be a peculiar form of *nævus unius lateris*, the speaker called attention to the fact that these pigmentations developed quite late in life, and are not confined to one side of the face.

A Case of Mollusum Contagiosum.—Presented by DR. C. W. ALLEN.

The patient was a female, aged thirty-six. She has been under treatment for syphilis since 1892. On July 30, 1894, she presented a peculiar urticaria like eruption about the neck and chin. This was somewhat itchy. The lesions show a central dell surrounded by a ring of waxy whiteness. No diagnosis was made, but the patient was told that the eruption was not syphilitic. On October 2d she returned complaining of a red, itchy scaly patch upon the forehead, between the brows, which had been present for five weeks. She said the whole face and neck itched at times, and became scaly, especially upon the lids. Upon close inspection, numerous miliary yellow points were seen, and the finger detected them as firmly imbedded grains beneath the surface. A faint rosy ring surrounded most of the yellow points. With a small curette thirty two of these little growths were removed from the forehead, cheeks, and chin, and one or two from the chest. The microscope confirmed the gross appearance of small mollusum contagiosum tumors. A number of the growths have developed since that date.

DR. P. A. MORROW said that in one case of mollusum contagiosum coming under his observation he removed over three hundred of these growths situated on the trunk with the dermal curette, and the result proved very satisfactory. A few of the tumors were situated on the penis and scrotum.

DR. ALLEN said that in his case the interesting feature lies in the minuteness of the tumors, rather than their multiplicity. The symptoms, too, were unusual. There were itching, redness, and scaling in patches where the lesions were the most numerous. While making a microscopical examination of one of the tumors, he found imbedded in it what appeared to be an *acarus folliculorum*; it was immovable, but on the addition of a drop of glycerin it became active, all four of its legs moving, and its tail-end wiggling like that of a tadpole. Dr. Allen said he did not suppose the *acarus folliculorum* has anything to do with the production of *molluscum contagiosum* tumors; still, it may be present in many of them, and it is possible that the irritation and itching are due to its presence.

A Case of Lupus Erythematosus Disseminatus.—Presented by DR. P. A. MORROW.

The patient was a female, aged thirty-five. The eruption began two years ago, after the birth of her first child, and has continued ever since, with slight modifications. For instance, the lesion under the eye, which was originally circular or discoid in shape, has now grown much larger, its border has become partially effaced, and it is less circular in outline. Some of the lesions strikingly resembled those of *lichen planus*. The eruption has not been materially modified by treatment. At present it covers the face, extending to the margin of the hairy scalp, the ears, the chest and shoulders, and both arms. It has never presented any of the features of eczema.

DR. LUSTGARTEN said he regarded the case as one of *lupus erythematosus disseminatus*.

Dr. Fordyce said the lesions looked more like those of *lupus erythematosus* than anything else. Some of them resembled those of *lupus vulgaris*. The case was certainly an unusual one.

DR. MORROW said that during his recent absence from the city the patient was placed on specific treatment (ungt. hydrarg. ammoniati and hydrarg. iodium viride), which has produced some improvement. Still, she gives no history of syphilis, and it is not unusual to get a good effect in *lupus* from mercurial treatment.

A Case of Purpura Rheumatica.—Presented by DR. C. W. CUTLER.

The patient was a woman, aged fifty-four; she was perfectly healthy until two months ago, when a patch made its appearance on the right cheek, just below the eye. She states that when this first appeared it looked like a bruise, and that it was unaccompanied by any subjective signs. This patch gradually increased in size. The tissues of the cheek became thickened, and in the course of a few days the opposite cheek became affected in the same way. About two weeks later the woman had an attack of acute rheumatism, and with this dark-colored spots made their appearance all over the body, especially around the elbows and knees. She was confined to the house for two or three weeks. During this time the lesions on the cheeks were extending, and when she came to the dispensary three or four days ago they were in their present condition. The lesions on the body have largely disappeared. The patches on the cheek are purpuric in character, but there is more induration about them than is usual in such cases. She has had no trouble with her gums. Her general health now is excellent.

DR. C. W. ALLEN said that purpuric lesions appearing on the face, in his experience, seem to be of a more infectious nature than those on other parts

of the body. In children especially they seem to follow the infectious diseases—measles, whooping-cough, etc.

DR. KLOTZ thought that the patches on the ear were rather different from those on the face, and suggested lupus erythematosus.

DR. R. W. TAYLOR said the case appeared to him like one of acne rosacea in a habitual drunkard, upon which a purpura had been implanted.

DR. CUTLER, in closing the discussion, said he did not know whether the woman was a heavy drinker or not; she admitted indulging to some extent in alcohol or beer. He was rather inclined to agree with Dr. Taylor.

A Case of Mycosis Fungoides.—Presented by DR. MORROW.

The patient presented an eruption which has existed for six or seven years. On the thighs and back the surface was much infiltrated, and presented a number of small tubercles which have now almost entirely disappeared. There is no history of syphilis. The patient states that soon after his return home from the civil war he was told at Bellevue Hospital that he had locomotor ataxia. On the side of the chest are the marks of an attack of herpes zoster, which developed probably as the result of arsenic treatment. From the appearance of some of the lesions, Dr. Morrow said he was first inclined to regard the case as one of leprosy, but he has not been exposed to any source of contagion, and there is no enlargement of the ulnar nerve, no loss of eyelashes, and no tubercles on the face. One of the tubercles was excised and microscopically examined by Dr. Fordyce, who found nothing distinctive—nothing suggestive of lepra. The speaker said he regarded the case as one of mycosis fungoides, in the pre-mycotic stage.

DRS. FORDYCE and BRONSON both regarded the case as one of pre-mycosis fungoides.

DR. MORROW inquired whether any of the members had observed the occurrence of zoster as the result of arsenic treatment. Hutchinson, he said, has reported such cases. The fact that the lesions in this patient have existed for six or seven years has an important bearing on the diagnosis; it is questionable whether the pre-mycosis stage would last so long.

DR. FORDYCE said that in two instances he has observed the occurrence of zoster under arsenic treatment. One was a case of psoriasis; the other, lichen planus.

DR. SHERWELL agreed with Dr. Morrow that the pre-mycotic stage in this case has persisted for a rather long period.

DR. ROBINSON said he has seen two cases of zoster as the result of the arsenic treatment.

DR. LUSTGARTEN diagnosed the case as one of mycosis fungoides in an early stage. He has observed several cases of herpes zoster originate under arsenic. It is difficult to say whether the occurrence of zoster in those cases is simply a coincidence or due to a causative connection. The latter seems probable, as another poison, carbonic oxide, is apt to produce zoster.

DR. ALLEN said that the lesions in Dr. Morrow's case suggest mycosis fungoides.

DR. CUTLER said he has observed a number of cases where patients who are under the arsenic treatment developed zoster, but he has never regarded that drug as the direct cause of the lesions. Arsenic is taken so very largely, and for so many different diseases, that he has simply looked upon the occurrence of zoster in some of these patients as a coincidence. He agreed with

the previous speakers that Dr. Morrow's case was one of beginning mycosis fungoides.

DR. ELLIOT stated he has seen zoster develop in patients who were taking toxic doses of arsenic. Some years ago he saw a patient who was taking large doses of the drug for psoriasis; the man first developed a herpes zoster, and then became affected with a universal pruritus, which was so intense and persistent that he finally attempted to commit suicide. It is not surprising that zoster should occur with toxic doses of arsenic: the experiments made by Adankiewicz some years ago showed that large doses of this drug produce hyperæmia of the meninges of the cord and hæmorrhage into the cord, and in the post-mortems held on cases of zoster precisely the same conditions have been found.

DR. CUTLER said that in a number of instances he has aborted an attack of herpes zoster by the use of large doses of arsenic.

DR. KLOTZ called attention to the fact that in Dr. Morrow's case marked and rapid improvement took place under simple treatment (Lassar's paste); this he regarded as rather unusual in these cases. The patient states that he was entirely covered with scales, which under this treatment disappeared.

Report of Cases presented at Previous Meetings.—DR. ELLIOT reported that his case of lupus erythematosus of the ear and face, with marked atrophic condition, which was presented at the last meeting, had decidedly improved. The redness has disappeared, and only a scar is left.

DR. KLOTZ reported that in his case of atypical lichen planus there has not been much change in the appearance of the lesions; certainly none that would suggest a syphilitic origin, as some of the members thought. They are still covered with hard, thin scales, and do not show any infiltration in the center. In the lesion on the penis there is a hard, firm ring, which feels like wire underneath the skin.

DR. CUTLER reported that in his case of lupus erythematosus of the nose the lesion has almost entirely disappeared; the treatment consisted in the application of a solution composed of equal parts of tincture of iodine, chloral, and carbolic acid. Dr. Cutler also reported that the second case presented by him at the last meeting was undoubtedly one of lupus vulgaris. He has employed oil of cinnamon, but without any beneficial effect whatever.

DR. ELLIOT exhibited Unna's diascopes, which is useful in measuring the size of lesions and the distance between them.

DR. KLOTZ gave the history of a case of syphilis with unusual features. The patient was a man who presented himself at the dispensary with an indurated lesion on the prepuce, which he stated had made its appearance three or four weeks before. Some days later he returned and said that on the evening previous he had had high fever and an intense itching over the chest. On examination an eruption very similar to that of urticaria was found in this region; the lesions were reddish in color, and on top of each was a clear vesicle which did not cover the entire surface. These vesicles gradually become more numerous, and many of them dried up and formed a very thin scale in the center of the papule, which otherwise was soft and of a much lighter color than syphilitic papules usually are. They appeared exactly six weeks after infection. The speaker said he has never seen nor read of syphilitic lesions which appear as clear vesicles. The patient had taken no medicine.

DR. TAYLOR said that many years ago he showed a syphilitic patient who had urticarial papules, and on top of each was a pellucid vesicle. In that case they could be produced at any time by giving the patient potassium iodide.

DR. MORROW reported a case which he said might be termed retrogressive syphilis. The patient presented on the legs and the upper portion of the buttocks a number of pustular lesions, very characteristic of the pustular syphilide. These appeared about two or three months ago. Ten days ago he had a characteristic macular syphilide distributed over the chest. The lesions were small, and distributed very much as the first erythematous eruption usually is—not in large circles, as the later erythematous syphilide is very apt to present itself.

DR. L. DUNCAN BULKLEY gave the history of a case: A lady, otherwise in fair health, who every now and then has an erythematous patch appear on the right side of the lower jaw. It is usually about one inch in diameter, becomes elevated, hot, itchy, and painful, and then disappears, leaving a faint pigmentation behind. Recently she had a similar patch in front of the right ear. There are no lesions on other parts of the body. With the exception of a rheumatic diathesis, her personal history is negative.

DR. LUSTGARTEN referred to a similar case coming under his observation. That patient also gave a history of rheumatism, which induced him to regard it as a localized rheumatism of the skin. In his case the patient presented several patches about the size of a silver dollar, elevated, red, and intensely itching, which gradually disappeared under salicylate of sodium, leaving pigmented spots behind.

DR. SHERWELL related the history of a case of dermatalgia which recently came under his observation. The patient was a young man, who complained of a painful spot about the heel of the right foot. There was no history of rheumatism nor hysteria. He had, however, a fissure in ano on the right side, and this was remedied, with the idea that it might possibly, by reflex irritation, be the cause of the pain in the heel on that side. Whether the fissure in ano was the causative factor in this case or not Dr. Sherwell said he could not positively say, but since the operation the pain in the heel has entirely disappeared.

DR. FORDYCE called attention to the fact that pain in the heel is sometimes complained of with deep urethral trouble.

DR. LUSTGARTEN said that Dr. Landerer, of Leipsic, claims to have cured localized tuberculosis by injections of cinnamic acid.

DR. BRONSON reported the case of a child with an ulceration on the face, between the ala nasi and cheek. It commenced like an ordinary "cold sore," and underneath the scab an ulceration occurred which penetrated to about the depth of a split pea. In another case, in which a similar lesion occurred at the same spot, there was a vague history of hereditary syphilis, although the child was then nine years old, and presented no symptoms of that disease whatever. In this case the ulceration began without any provocation, and progressed rather rapidly until it reached the size of an old-fashioned three-cent piece. It was finally cured by means of applications of pure nitric acid.

DR. BULKLEY reported a somewhat similar case, in which the lesion occurred on the leg. The ulceration took about a month to heal. He regarded it as a necrotic ulcer.

DR. KLOTZ reported a similar case in which the lesions occurred on the right side of the nose. The largest one was about half the size of a large cherry. It healed under the application of a ten-per-cent salicylic-acid plaster.

Correspondence.

ON THE RELATIVE FREQUENCY OF POSTERIOR URETHRITIS.

Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR : I observe in the recent (December, 1894) issue of your journal an article by Dr. Herman Goldenberg, in which reference is made to the relative frequency, time of onset, ætiology, etc., of posterior inflammation of the urethra as occurring in connection with anterior inflammation of that organ.

As I have, during the last four years, been studying these features of the disease with a large degree of interest, I was glad to note the coincidence on several points discussed of the author's views with my own, as expressed in a paper entitled *The Rôle of the Posterior Urethra in Chronic Urethritis*, read by me before the American Association of Genito-Urinary Surgeons at the Harrogate, Tenn., meeting, in June, 1893 (published in the *New York Medical Record*, June 29, 1893, and in numerous other journals during several months thereafter), and affirmed, in a subsequent paper by me, entitled *Why Chronic Urethritis is Ordinarily Difficult of Cure, and an Efficacious Method of Curing It*, read before the Tri-State Medical Society of Iowa, Illinois, and Missouri, at Kansas City, Mo., April 4, 1894 (*The Medical Fortnightly*, June 15, 1894, and other journals).

In these papers (the conclusions of the former of which were published in the September, 1893, issue of the *JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES*, page 361), like Dr. Goldenberg in his recent article, I took the pronounced position that posterior inflammation occurred so naturally and uniformly as a follower of anterior urethritis that it implied an erroneous doctrine to call it a complication ; that it succeeded whether the formerly invoked "external and internal causes" (Finger) were present or not, or whether there existed a strong or a weak external urethral sphincter (Guyon) ; that the time of onset had been miscalculated in most cases ; that the mode of production had been misinterpreted, the inflammation being carried back really through the lymphatics instead of by continuity of structures simply, etc.

My later paper, on *Chronic Urethritis*, gave statistics relating to one hundred and sixty cases of urethritis, acute and chronic, gonorrhœal and non-gonorrhœal, in which posterior infection occurred in ninety-four per cent of the acute cases and ninety-eight per cent of the chronic cases ; and my subsequent experience has only served to confirm the position previously taken.

I am, very respectfully,

BRANSFORD LEWIS, M. D.

Book Reviews.

A System of Genito-Urinary Diseases, Syphilology, and Dermatology. By Various Authors. Edited by PRINCE A. MORROW, A. M., M. D. With illustrations. In three volumes. Vol. III. Dermatology. New York: D. Appleton & Co., 1894.

The third and last volume of this system by Dr. P. A. Morrow is devoted to dermatology, and is fully up to the standard of the preceding volumes in point of matter and manner of arrangement, and, together with its predecessors, makes a most complete and valuable addition to the literature upon these subjects.

The importance of dermatology as a special study and the great strides it has made in the past few years are shown in the large number of new diseases isolated and described as distinct affections which were heretofore unknown or identified with others, and in the grouping together of various other diseases which are now recognized as various manifestations of one and the same process, while improved methods of investigation have also made more clear the ætiology and pathology of these affections.

The two hundred and more subjects comprising the subject matter of this volume have been prepared by twenty-seven different authors, the greater number of whom are men well known as writers and teachers in this branch of medicine, and the subjects allotted them are for the most part those with which their names are closely associated in dermatological literature.

The stupendous work of the editor in the apportionment and arrangement of these many subjects is ably done, and the volume quite fulfills his aim, as set forth in the preface, of being "a coherent, symmetrically proportioned work, complete in all essential details and thoroughly up to date."

The contents of the book are divided into two parts. Part first is a general description of the subject, and includes the *anatomy* and *physiology of the skin*, *semeiology*, *general ætiology*, and *classification*, while part second is devoted to the study of special diseases.

The section on *anatomy* and *physiology* is written by Dr. Louis Heitzman, and is copiously illustrated; the chapter on *semeiology* is by the editor, while that on *ætiology* and *diagnosis* is the work of Dr. W. A. Hardaway.

Concerning the bacteriological causation of disease, the author very aptly remarks that while the present tendency of the times is to attribute all diseases to micro-organisms, the dermatologist, through over enthusiasm, is apt to err. Before stating positively that a bacterium is the cause of a disease, it must be proved in accordance with the laws laid down by Koch.

In the *classification* the author, Dr. P. A. Morrow, follows, with certain changes, Crocker's modifications of Hebra's system. He does away with the class of hyperæmias, and groups all erythemas under the general head of inflammations. Urticaria is classed with the neuroses, "because in its nature and pathogenesis it is essentially a cutaneous neurosis."

In part second under class first, inflammations, the first diseases described are the *exanthemata*, his subject being most excellently treated by Dr. J. E. Graham.

Under *erythema* Dr. George T. Elliot describes *erythema scarlatiforme*, a non-contagious symptomatic eruption which simulates in its cutaneous manifestations true scarlatina, but differs from it in not having a specific cause. *Erythema scarlatiniforme* and *erythema scarlatinoide*, between which the French school draws a distinction, he considers one and the same thing, differing only in the acuteness of the process.

One of the most interesting chapters in the book is that devoted to *dermatitis herpetiformis* by Dr. H. W. Stelwagon. The disease is excellently described and is arranged according to the different types which it at different times assumes, and several typical cases are accurately portrayed. The author thinks, and it seems to me with very good reason, that Dühring was premature in recalling his statement of the identity of *impetigo herpetiformis* with this affection. Dr. Joseph Zeisler, however, describes *impetigo herpetiformis* under that title in another part of the work.

In an article on *herpes zoster* by Dr. Joseph Zeisler the author gives merely a passing mention to the use of the galvanic current as being recommended for the relief of the neuralgic pain accompanying the disease. In a series of cases which I treated to test the efficacy of the galvanic current I found that in over eighty per cent the attacks were remarkably shortened and in some cases were actually aborted.

A very excellent article is that on *eczema* by Dr. H. G. Piffard.

In the ætiology of the disease Dr. Piffard takes a stand between the German view of its external causation and the French view of its constitutional origin, and believes that it "arises in consequence of some unknown constitutional condition frequently brought into evidence by external irritation, and that the fundamental cause is due to a diathesis hereditary or acquired of an indefinite duration." Under the title *dermatitis seborrhoica* Dr. George T. Elliot, in an exhaustive and well-written article, describes the disease better known by the name *eczema seborrhoicum*, which was given it by Unna. The change of name seems to me well advised. In comparing this article with that on *seborrhæa sicca* by the same author it would appear that he considers them one and the same thing, the difference, if any exists, being of degree only.

The articles on *lichen*, *lichen ruber*, *lichen planus*, and *lichen scrofulosus* are furnished by Dr. George Henry Fox, and are written in that author's very best style, a sufficient guarantee of their clinical value. He deplors the fact that in the description of *lichen ruber* many writers have incorporated with it a distinct disease (*lichen planus of Wilson*), which has materially interfered with a correct understanding of it. He divides *lichen ruber* into three forms, from the varieties of eruption which the disease may present :

1. Papular form : *a*, with discrete lesions ; *b*, with confluent lesions.
2. Squamous form : *a*, with small, irregular patches ; *b*, with large, band-like patches ; *c*, with discoid patches.
3. Rugous form : *a*, with parallel furrows ; *b*, with moniliform or beaded ridges.

The article is much enhanced by excellent photographic illustrations showing the types of eruption in the different forms.

Drug eruptions is exhaustively treated by Dr. Prince A. Morrow, who gives, alphabetically arranged, seventy-six different drugs which are capable of producing characteristic eruptions.

Dermatitis venenata and *dermatitis calorica* are also treated by the same author.

An exceedingly able article, and one that is thoroughly up to date, is that contributed by Dr. James T. Bowen on *tuberculosis of the skin*. In the short introduction which precedes the description of the different forms of the disease, Dr. Bowen states that "no other belief in the domain of pathology can be regarded as more securely established than that in tuberculosis we have to do with a chronic infectious disease caused by the action of a specific organism, the tubercle bacillus."

In *lupus*, the best-known form of tuberculosis of the skin, the tubercle bacillus has been frequently demonstrated, and while as yet it has been impossible to produce upon the skins of animals this clinical form of tuberculosis, the overwhelming accumulation of clinical facts must serve to dispel any lingering doubt in the skeptical. There are other forms which may now be regarded as distinct varieties of cutaneous tuberculosis--namely, *scrofuloderma*, *tuberculosis cutis*, and *tuberculosis verrucosa cutis*. These he considers as mere varieties of the process, and would regard them in the same light as the varied appearances produced by syphilis upon the skin. He would drop the names *scrofuloderma* and *lupus* entirely, and would designate the clinical features that they represent in the same manner as are the different lesions in syphilis or leprosy, and predicts that that will at no distant time be done.

Under *tuberculosis cutis* the author describes the rare form of ulcer occurring in subjects affected with tuberculosis of the internal organs.

The rarity of this form is shown from the statistics of Chiari, one of the first to describe it, who found it only five times in over seven thousand cases examined. In considering the pathology and morbid anatomy of the disease, he states that while heretofore cheesy degeneration and Langhans giant cells were considered pathognomonic of the affection, recent investigations have shown them to exist in conditions other than those of tuberculosis, and that the sole pathognomonic feature that we have to regard is the presence of the tubercle bacillus, which is found in all forms of tuberculosis of the skin, although in some only sparingly.

Under ætiology, he says that as it has been abundantly proved that the various forms of the disease are caused by inoculation with the tubercle bacillus, it only remains for us to consider in what manner this inoculation takes place; he then gives at some length the methods of direct and indirect inoculation.

In regard to the rôle played by heredity in the development of the disease, he states that its importance is steadily diminishing in the light of its specific nature.

Lupus erythematosus is also very well described by Dr. Bowen; concerning its relationship to tuberculosis of the skin he speaks at some length, but from his own experience he is inclined to believe that it is of an entirely different nature.

The subject of *leprosy* is exhaustively treated by Dr. Prince A. Morrow, over forty-five pages being devoted to it.

The article is made doubly interesting by the addition of many excellent illustrations showing the disease in its various types and the many deformities produced by it. An interesting feature of the illustrations is a full-

page portrait of Father Damien, taken from the author's Hawaiian collection.

The contagiousness of leprosy, in regard to which there is a great diversity of opinion, the author believes to be fully sustained by the immense mass of positive clinical testimony. He does not believe that heredity can be regarded as a prominent factor in the propagation of the disease. He thinks that most observers err in assuming that there is one exclusive mode of infection, and he now believes that sexual intercourse plays a very inappreciable rôle in conveying the germs of leprosy, although formerly he attached considerable significance to this mode of contagion.

He does not think that in this country the compulsory segregation of lepers and lazaretto, as has been recommended by some health authorities, can be considered a necessary measure, as leprosy does not show any alarming tendency to spread or to seriously menace the public health.

The treatment of the subject is so complete, and Dr. Morrow's studies in leprosy are so well known, that further comment is unnecessary.

Epithelioma is well described in an article contributed by Dr. John A. Fordyce.

He includes in his description three varieties of malignant skin cancer : First, *superficial, flat, or discoid* ; second, *deep-seated or nodular* ; third, the *papillary*. In regard to leucokaratosi of the tongue being the first stage of malignant disease, as has been claimed by some writers, Dr. Fordyce says that our knowledge of the cancerous nature of the disease is yet too vague to admit of a positive expression of opinion on this point.

He speaks of two instances of a peculiar variety of epithelioma which is not included in the varieties mentioned. "In one case an extensive ulcer covering two thirds of the forearm, resulting from a burn, refused to heal after the ordinary methods of treatment, its edges became elevated and hard, while the granulations over its surface were larger and harder than healthy granulations and assumed a warty-like character. A microscopic examination revealed a typical squamous-celled epithelioma. In another case an ordinary ulcer of the leg presented a similar appearance, which was shown by the microscope to be due to atypical epithelial proliferation with the production of epithelial 'pearls.'"

Dr. Fordyce states that among the causes which favor the development of cancer the best known and most potent is undoubtedly chronic irritation of the tissues of slight intensity.

Concerning the parasitic theory of the development of cancer the author observes : "With our present knowledge of this subject it can only be stated that cancer cells have, in a certain number of instances, been found infested with bodies which are probably parasitic protozoa, and that the new growth may be dependent on the entrance of these bodies into the epithelial cells. Until, however, some method of cultivating the organisms is devised, together with the artificial production of the disease, their exact relationship to cancer must remain hypothetical."

The class of *neuroses* is very ably treated by Dr. Edward Bennet Bronson.

Under this title he considers only those conditions which concern the sensory nerves, including those purely sensory, together with those in which a sensory disturbance is combined with a motor.

The author states that for a correct understanding of the cutaneous æsthe-

sis, which may be abnormal through excess, defect, or perversion of sensation, we must bear in mind the fact that the senses of the skin are multiple and in abnormal conditions may not all be affected alike. He speaks of them as, first, the sense known as *common sensation*; second, *sense of temperature*; third, the *pressure sense*; fourth, *sense of contact*; fifth, *sense of pselaphesia*. This last sense he ranks with the special senses of sight, hearing, and smell, and believes it to be provided with its own special organ; it implies more than simply touching, but rather "feeling for or of a thing." The states corresponding to these abnormal conditions of excess, defect, or perversion of any one or of all these several senses he describes as *hyperæsthesia*, *anæsthesia*, and *paræsthesia*. In his consideration of the latter he mentions prurigo, which he believes to be a trophoneurosis, the trophic element consisting of an inflammatory papule, which is secondary and due to scratching.

Elsewhere in the work an article written by Dr. Joseph Zeisler is devoted to *prurigo*. He thinks one is absolutely unjustified in looking upon prurigo as a pure neurosis, and says that recent investigations have furnished proof that the papule of prurigo is really a primary lesion, and not the result of scratching; he confesses, however, our inability to satisfactorily explain the true pathology of the disease.

Under the title *hidrocystoma*, Dr. A. R. Robinson describes a peculiar disease of the sweat glands "affecting the faces of washerwomen or those whose occupation exposes the skin of the face to a warm, moist atmosphere." The disease was first described by him in 1884 under the name *sudamina*, previous to which time it had never been reported. Since that time Dr. George T. Jackson and others have reported examples of the disease under the designation *dysidrosis* of the face—a term which Robinson objects to as inappropriate, preferring the name hidrocystoma on account of the anatomical character of the lesions.

An excellent chromolithograph accompanies the article, showing the character and color of the lesions.

In treating of *seborrhœa* the author of the paper, Dr. George T. Elliot, while giving the definition usually accepted, differs from most writers in his conception of the disease, and would define it as "a functional disturbance and secretion of the fat-producing glands of the skin, characterized by an excessive production of fat." For him the *seborrhœa oleosa* is the only representative of true seborrhœa, and he would exclude from that category "all those various manifestations of cutaneous disturbance comprised under the name of *seborrhœa sicca*." These latter he would class as clinical varieties of *dermatitis seborrhoica*, and believes them to be of parasitic origin.

Dr. Elliot has also contributed an article on *acne*, in the treatment of which he discards the time-honored custom of opening the pustules and evacuating the contents, as he believes that scarring is produced by it. He states his reasons for this belief, but they seem to me rather more fanciful than real.

The series of articles on diseases of the hair follicles is contributed by Dr. George Thomas Jackson, of which it is sufficient to say that the work is in the author's very best vein.

The article on *tinea trichophytosis* is contributed conjointly by Drs. Arthur Van Harlingen and E. J. Stout. The four varieties of the disease usually given, namely, *tinea circinata*, *tinea tonsurans*, *tinea barbæ*, and

tinea unguium, are described, together with their treatment, under separate chapters. In describing the nature of the fungus the authors state that it is identical in the three forms affecting the body, scalp, and beard—a view that is not sanctioned by the recent researches of Sabouraud, who asserts that the disease is due to several species of fungus, the two principal species found in the human being the one which has small spores and is found only on the scalp, and the one which has large spores, and is the cause of *tinea barbæ* and *tinea circinata*.

Other articles are contributed by Drs. Charles W. Allen, Henry W. Blanc, William Thomas Corlett, Isidore Dyer, M. B. Hartzell, C. F. Hersmann, James Nevins Hyde, Frederick J. Leviser, Rudolph Matas, S. Pollitzer, and Francis J. Shepherd, whose previous work in dermatology is a sufficient guarantee of the articles intrusted to them. C. C. R.

International Atlas of Rare Skin Diseases. Edited by P. G. UNNA, MALCOLM MORRIS, H. LELOIR, and L. A. DUHRING. Leopold Voss: Hamburg and Leipzig.

The tenth fasciculus of this admirable atlas shows no falling off in the variety of the cases chosen for illustration or the artistic excellence with which they are portrayed.

Plate XXIX illustrates an exceedingly rare condition of the follicular structure of the bearded portion of the cheek and submental region, attended with ulceration and denominated by its author, Dr. J. Janovsky, *perifolliculitis necrotica*. The clinical features consist essentially of infiltrations, for the most part of a distinct follicular type as seen in sycosis, while others are circumscribed without being confined to the hair follicles. These infiltrations break down, forming ulcers from the size of a pinhead to that of a lentil.

The distinguishing feature of the eruption is the joining together of single ulcers, forming a large crateriform ulcer with irregular sinuous edges, partly undermined, indurated, and steep, secreting a considerable amount of thick pus mixed with shreds of necrosed tissue. The margins of the ulcers are connected by bridges of undermined and disintegrated skin.

Plate XXX shows two cases of congenital multiple lesions of the face and scalp, to which the author, Dr. H. Radcliffe Crocker, has given the name of *milium congenitale en plaques*. In the first case the patches are numerous, variously sized and shaped, occupying the cheek, submental, temporal, and occipital regions. The irregular patch over the occiput measured nine inches and three quarters by two inches and three eighths. The color of the affected skin was a pale reddish yellow, the surface finely granular, consisting of closely aggregated, minute, pale-yellow papules; was slightly raised and devoid of hairs; the edges, sharply defined, more elevated, consisted largely of comedones with the usual black tops.

In the second case which came under the author's observation there was but a single patch on the face, but it was characterized by the same minute, yellow, miliary granules on the surface, the raised border, and the comedones upon it. The diagnosis of *milium congenitale en plaques* seems to the author to be justified by the result of the microscopical examination of portions of excised skin.

Plate XXXI illustrates two rare forms of skin disease. Fig. 1 represents a case of *sclerodactylia annularis ainhumoides*, by E. von Düring. The

morbid process is characterized by a kind of myxomatous swelling of the first and second phalanges of the fingers and complete absorption of the terminal phalanx. The whole ten fingers are involved. The terminal phalanges of the two middle fingers, of the left index finger, and the fourth finger of the left hand are entirely absorbed. A completely sclerosed ring passes around the middle of the second phalanx of the right index finger. The bones of the other fingers appear to be thickened and the soft parts extremely indurated. The nails on the absorbed phalanges have shrunk to small and thickened horny plates. Figs. 2 and 3 portray upon the forehead and arm of the same patient an exceedingly curious condition, denominated by the author, P. G. Unna, *asphyxia reticularis multiplex*. The affection the author regards as essentially a multiple necrosis due to an excessive venous stasis of the skin. The adjective *reticularis* is employed to designate the netlike venous stasis from which the necrosis develops and distinguishes this form of asphyxia from others.

Selection.

Dermato-Neuroses and their Treatment. H. LELOIR (*Brit. Jour. of Derm.* vol. vi, Nos. 11 and 12, 1894).

Under the generic term dermatoneuroses the author includes all forms of cutaneous disease, "secondary to a modification either of the central, ganglionic, or peripheral nervous systems." The group is divided into—

I. Purely sensory dermatoneuroses, comprising (a) hyperæsthesia, paræsthesia, and (b) anæsthesia.

II. Purely motor dermatoneuroses—e. g., cutis anserina.

III. Pure vasomotor dermatoneuroses, including erythemas, anæmias, and œdemas (urticaria).

IV. Cutaneous tropho-neuroses. In this class the neuroses may be pure, but are generally so intimately combined with vasomotor disturbances as to make it practically impossible to determine with which form one is called upon to deal. They are usually of some intensity, and are, for the most part the result of pronounced and permanent modifications of nervous influence. The tropho-neuroses are: 1, Chronic erythemas and dermites; 2, papular; 3, vesicular; 4, bullous; 5, pustular affections; 6, ulcerations; 7, gangrenes; 8, chronic œdemas (elephantiasiform conditions); 9, scleremas; 10, sclerodermia; 11, nerve leprosy; 12, certain ichthyotic conditions; 13, hyperkeratinizations; 14, pigmentoses.

V. Glandular dermatoneuroses, secondary to functional derangement of the nervous system. They are divided into (a) sweat-gland, (b) sebaceous-gland, (c) hair-follicle. (d) nail dermatoneuroses.

These affections rarely remain confined to one group, and the classification is therefore difficult to apply. With regard to the underlying nervous disturbance, dermatoneuroses are *cum materia*, in which there is a demonstrable lesion in the central or peripheral system or the great sympathetic; *sine materia*, in which the modification is functional.

The second installment of the paper is occupied with therapeutics. The general plan of treatment is "to prevent contact with the air and to avoid mechanical irritation of the skin sources of local infection." The means to this end consist of thick layers of ointment on linen, covered with wadding or skin gloves, gelatins, varnishes, plasters, plaster mulls, drawers, knitted vests. In severely pruriginous cases, scarifications and numerous fine punctures sometimes afford relief. Vasomotor constrictors, alcohol, ergotin, ichthyol (in alcoholic solution) gave variably successful results. Tepid douches down the spine are often useful, counter-irritation only occasionally. Of the various applications of electricity, the author finds that the current from a point connected with a powerful static machine passed slowly over an area affected with pruritus gives most encouraging effects. In other neuroses the results were very inconstant. Internal treatment comprises the usual sedatives and tonics, arsenic given first place. Hygiene should not be neglected, and all irritants, internal and external, to the nervous system removed, if possible. Auto-intoxication and gout are often ætiological factors. These diseases have been cured by the removal of some such toxic agent as alcohol or carbon monoxide.

J. C. J.

Item.

The Third International Dermatological Congress will not be held this year as proposed. The time of meeting has been postponed because the British Medical Association meets in London this summer, and it was feared by the Executive Council of the Congress that the autonomy and international character of the Congress would be imperiled by holding its meeting at the same time and place; as well as that the necessarily divided interests of the British dermatologists would prevent that full exercise of hospitality to the foreign visitors which they so much desired to extend.

As the next meeting of the International Medical Congress will be held in Moscow in 1896, it is possible that the meeting of the Third International Dermatological Congress may not be held until 1897.—GEORGE THOMAS JACKSON, *Foreign Secretary for the United States*.

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Original Communications.

LATENT GONORRHŒA IN WOMEN.*

By W. R. PRYOR, M. D.,

Visiting Surgeon to the City Hospital (Gynæcological Department); Visiting Gynæcologist to the St. Elizabeth Hospital; Adjunct Professor of Gynæcology in the New York Polyclinic; Fellow of the American Gynæcological Society, etc.

WE are to consider this latent gonorrhœa in woman in its bearing upon the individual herself, upon her perhaps innocent husband, and upon the offspring.

I delivered by forceps a woman who was the mother of six children of a boy. During gestation she presented absolutely no symptoms, subjective or to me apparent, of gonorrhœa. Her labor was followed by vulvo-vaginal abscess, acute gonorrhœal urethritis, and mastitis. I failed to obtain from her by the closest questioning any history of infection. Her husband, years before marriage, had a clap, but his wife had passed through her labors free from any complication. They had been married fifteen years. The explanation of this case is that the last labor was sufficiently bruising to the tissues to so reduce their resistance as to render them susceptible to the influence of the gonococcus. Certainly my repeated examinations before labor failed to discover any symptom of a gonorrhœa which in a more propitious state of the tissues became active.

Quite frequently have I delivered women who have passed through the puerperium without a single complication, and been compelled, after the decidua was cast off and the new endometrium formed, to operate for an acute gonorrhœal endometritis. One case in particular I recall which infected her uterus no less than three times from a subacute ure-

* Read before the Section on Genito-Urinary Surgery, New York Academy of Medicine, January, 1895.

thrititis that produced absolutely no symptoms beyond a slight urethral discharge.

Before I began to curette the uterus as an operation preliminary to cœliotomy, I observed several cases which formed a pyosalpinx in a perfectly healthy tube, which I had left after removing a pyosalpinx on one side. I have not and shall not cite any case in which there was any question of a fresh exposure and infection. They are all cases in which I could eliminate any such possibility.

A man had a gonorrhœa a year before his marriage. After marriage he had a very slight watery discharge, which he attributed to too faithful attendance upon his wife. She bore him four children. At one labor she suffered a severe laceration of the perinæum, and it was for this condition that she came to me a year after her last delivery. I operated and cured her. In due time she returned to her husband, and in ten days developed a most virulent endometritis, with bilateral purulent salpingitis and peritonitis. I curetted her, and in this way removed every trace of her infection. I also examined the husband, and could find no urethritis. In a few months she returned again to her husband, and again had salpingitis and peritonitis. She was not seen by me for ten days, when the tubal trouble had so far progressed as to require a cœliotomy. Now, the interesting incident in the case is just this: The husband I saw two days before his wife's return the second time, and his urethra was free. I examined him again when he came to report her condition, twenty-four hours later, and after the salpingitis began, and he had no clap. But when I operated upon her he had a profuse purulent urethritis, seven days after I first examined him.

Dr. Bennet Beach found the gonococcus in the discharges of both husband and wife. At some remote time this man had given his wife a clap of a degree not sufficient to produce symptoms, or else the symptoms were masked by those incident to her pregnancies and confinements. Until an extra tax was put upon her system and pelvic organs by the perineorrhaphy and consequent detention in bed, she was able to resist the presence of the gonococcus; but, upon returning to her husband, the vaginal orifice quite tightly closed, coition bruised the urethra. This locality became acutely infected, endometritis followed, and the woman escaped a section then only because of my interference.

The second attack of tubal inflammation was not strictly a fresh infection, rather was it a lighting up of a previous one. But it was severe enough to convey gonorrhœa to her husband. With ovaries and pus tubes gone she still has a slight uterine discharge in which the gonococcus is found.

We have, then, an unrecognized gonorrhœa in the woman, produc-

ing by a strictly auto-infection acute attacks of gonorrhœal urethritis, vulvo-vaginitis, endometritis, and salpingitis.

I could multiply cases, but these quotations will suffice. In one case only have I been convinced that a husband with clean urethra has been infected by a wife to whom he had previously communicated gonorrhœa, but who was supposed to be free from it—that is, he contracted an acute infection from his wife, who had it as a latent disease.

My belief is that this latent gonorrhœa in woman can become in her acute with complications by any process which will decrease the resistance of the infected tissues; and my experience has shown such a condition propitious to the development of the gonococcus to follow confinement, operations, and violent coition. But I can not conceive of these cocci, attenuated, old, and degenerate, starting an infection in the male urethra unless they have become rejuvenated by a sudden development into reproductive activity. Still, one case I have seen which would rather point to the possibility of such a coincidence.

Upon the offspring the following effects I have noticed: Specific vulvo-vaginitis I have seen once in a baby ten months old. The mother was infected, but supposed cured, and washed the child with a sponge which she handled after taking her douche.

Three times have I treated for vulvitis children of between three and four years who had bathed with gonorrhœic mothers. Not one of these women had the least idea that she was infected, and in not one could I find a suspicion of any symptom of gonorrhœa, beyond a very slight cervical milky leucorrhœa. Of the husbands I can give no reliable history; they all indignantly negated every compromising question.

In one case, already quoted, the mother had a vulvo-vaginal abscess and urethritis. She presented her baby with the most typical gonorrhœal oral ulcers (Rosiński's) I have ever seen, the child in return giving her a mastitis which went on to suppuration.

It is almost needless to call your attention to the frequency of gonorrhœal conjunctivitis in the newborn. The matter is being quite widely discussed with a view to preventing blindness.

For myself, I have seen women who presented not one symptom of clap, giving birth to children which had most virulent conjunctivitis. I have not yet seen a male or female newborn which had contracted gonorrhœa of the genitals from its mother; but a case is on record of a child born with gonorrhœal conjunctivitis, contracted *in utero*.

Regarding the ætiology of this disease, our position seems to be this: Every case of acute gonorrhœa will show the typical gonococcus, and also very many cases of chronic infection. Where the gonococcus

is not found by staining, gonorrhœa may be present. But we can safely say that if we fail to cultivate, in acid media, the gonococcus and can not find it by staining, there is no gonorrhœa.

One hundred and ninety-seven prostitutes taken at random furnished the following results: The urethra, vagina, and cervix uteri were examined in all. The microscope alone was used, no cultures being made, and six hundred specimens were made from the one hundred and ninety-seven women.

Cervix uteri.—Gonococci were found in 31·3 per cent. The result was doubtful or negative in sixty-eight per cent. In those cases having the gonococcus there was a marked purulent discharge in two only, redness in one case, and in seventeen cases no clinical symptoms whatever. I wish to draw your attention to the importance of these examinations. The absence of clinical symptoms is most suggestive. In eighteen cases the gonococci existed once only with staphylococci; and in forty-six cases where no gonococci were found, staphylococci were present in but two. Clinically, of those forty-six cases two presented a thick secretion and one blood. The absence of staphylococci and other cocci in the very class where we would expect other pyogenic cocci as well as gonococci is worthy of note.

Vagina.—Out of the one hundred and ninety-seven women one hundred and eighty presented a vaginal discharge. Many forms of bacterial life were present, but in one case only was the pure gonococcus found alone, and in six other cases it existed in conjunction with other germs. Of course, in these six cases it is reasonable to suppose that the gonococci leaked from the cervix or urethra into the vagina in several. In one hundred and seventy-three of these one hundred and eighty women no gonococci were found in the vagina, and in seventy-four no micro-organisms at all. Staphylococci were found in three cases.

Urethra.—One hundred and twelve of the women showed gonococci. Of these women, in twenty-one the disease was apparent by ocular inspection, but in ninety-one cases the gonococcus was found with no pus discharge. Indeed, six had that very day been discharged from hospitals as cured. In sixty-one cases there was not the least suspicion of trouble. Seventy times a follicular urethritis with discharge existed, but gonococci were not present.

When it was thought sufficient to take the discharge from the cervix of gonorrhœics, the gonococcus was found in but 9·5 per cent of cases; but scraping with a Volkmann's spoon shows that the gonococcus can be found in even fifty-four per cent of the cervixes of gonorrhœics.

It is my belief that in an overwhelming percentage of cases puru-

lent urethritis and endocervicitis are due to gonorrhœa; and, unless I can discover some very plausible reason for these two conditions, I attribute them to gonorrhœa.

Fifty-three gonorrhœic women were kept under observation for five months. At the end of that time the gonococcus was found in the cervix in seventy-five per cent.

The gonococcus seeks the racemose gland for its habitat. The lymphatic tissues and lymphoid endometrium it occasionally invades. Therefore we find gonorrhœa as a latent disease in women in the compound racemose glands of the cervix, the vulvo-vaginal glands, and of the urethra.

Dormant gonorrhœa may produce absolutely no macroscopic changes and microscopically be unrecognized. In such a state it may become acutely virulent at any moment, so as to be communicated to other tissues of the woman, or to the male, or her child. When latent, it is the more dangerous, because producing no symptoms and thus not recognized.

The complications due to latent gonorrhœa, such as cystitis, peritonitis, and salpingitis, I will not discuss. The causative agent is insignificant in view of the importance of the complication. But I can not refrain from expressing my view of the prevalence of pyosalpinx. Certainly, in the lower walks of life and among prostitutes, gonorrhœa plays a prominent rôle in the causation of pyosalpinx; but in the middle and upper classes I believe most pelvic inflammation is the result of too much minor gynæcology. Ignorant of the anatomy and physiology of the uterus, every practitioner has provided himself with specula, sounds, and applicators, and treats the inside of the uterus. I am perfectly aware of the importance of this statement, and I make it advisedly and as the result of my experience.

No case is to be considered cured when the discharge from any pelvic organ contains the gonococcus developed by staining or culture. Clinically, any purulent discharge from the urethra or cervix is suspicious; for pyogenic cocci other than gonococci do not remain for any length of time in the compound racemose gland.

It is exceedingly difficult to cure, and I will mention my method in the chronic cases. Chronic gonorrhœal urethritis in the female I treat by means of nitrate of silver—twenty to thirty grains to the ounce—applied through a urethral speculum.

If the infection be seated in one or both vulvo-vaginal glands, excision alone will suffice. Incision is efficacious temporarily only. Gonorrhœal endocervicitis is a most intractable affection. In dealing with the infection we must not lose sight of the possibility of cervical steno-

sis. Therefore chloride of zinc I do not advise. The weaker chlorides, as of mercury, and carbolic acid, I do not find equal to the condition; I use a double-strength tincture of iodine. Iodine, as you know, is more powerfully germicidal than chlorine, and applied in this volatile state it is a most valuable remedy. At the same time it is less injurious to the tissues than other equally good remedies. A chronic vulvitis I treat by means of nitrate of silver. Chronic vaginitis I treat the same way, but always keep the vagina packed with iodoform gauze. This latter material straightens the folds of the mucous membrane and prevents invasion of the vagina by any one. Indeed, I plug up the vagina in cases also where I treat the cervix. Thus reinfection during treatment is guarded against.

Our cervical applications should never extend beyond the internal os.

In very young children who have gonorrhœal infection of the genitalia in a chronic form, I have been compelled to abandon very often every means except frequent irrigations with the weak antiseptic super-saturated solution of boric acid.

Why the gonococcus affects the racemose gland and not the tubular, I can not tell you. The endometrium is not propitious to its presence, it being found here in only about fifteen per cent of cases. Certainly it does not occur as a latent gonorrhœal endometritis. Pyogenic infections of the endometrium give rise to very prominent symptoms, and we do not see the infection here as a latent condition.

The prevalence of gonorrhœa I do not believe due so much to the neglected gleet in the male as to the uncured latent form in woman. It is so extremely seldom that women are cured where once the infection has reached the cervical glands, that we are almost warranted in saying that it is never cured.

Women who contract gonorrhœa usually stop treatment the moment disagreeable symptoms disappear, and for very obvious reasons. This is especially true of prostitutes, they being indifferent to conditions not painful, and wholly rebellious to routine treatment of symptoms which do not appeal to them as important. Gonorrhœics of a better class, deceived wives, or too trusting sweethearts, are prompted in their disobedience to our orders by modesty only. So it is that we gynæcologists, while recognizing the danger of turning loose upon society these symptomatically cured yet virulent cases, are unable to compel their attendance upon our private and public clinics. And it is because there are so many unrecognized cases in the community, and the complications due to gonorrhœa are really becoming one of the problems of our social life, that I deem the subject worthy of your attention.

There being no way of controlling even our private patients, I do not see what good segregation and inspection of prostitutes will do. Syphilis may be limited by this means, but not gonorrhœa. I commend to you particularly the strong iodine preparations and vaginal tampon of iodoform gauze in all cases where the cervical canal is infected.

We are to handle this condition in women in the light of its communicability to others and the very grave complications to which it gives rise in woman herself.

It will not be limited in its ravages very much until we are able to educate women to the belief that every purulent discharge is pathological and never natural. We have got them to that point as regards intermenstrual bleedings, and hope to persuade them to look upon pus from the genitals as having the same significance as pus from other localities.

EPITHELIOMA OF THE PENIS.

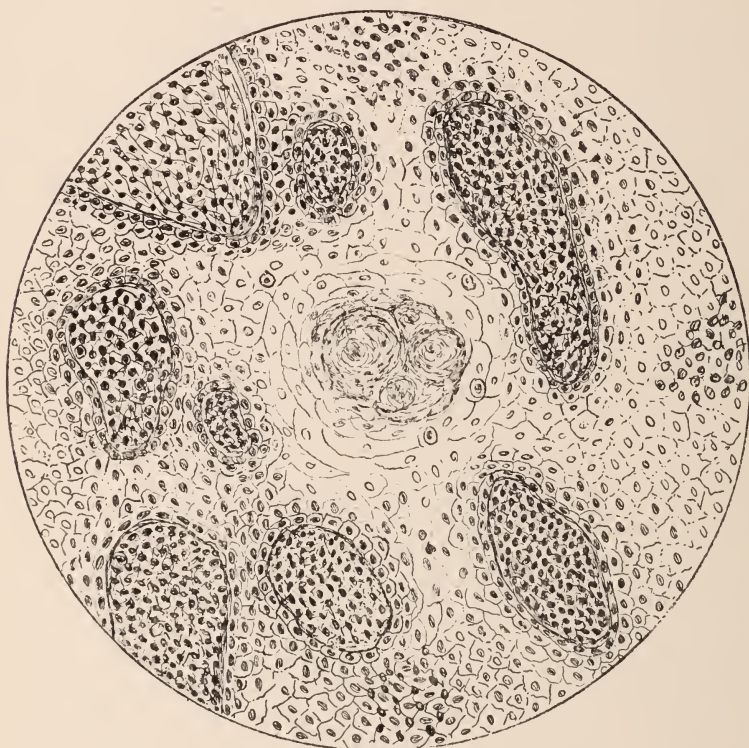
By EDWARD MARTIN, A. M., M. D.,

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ON August 31, 1893, a man, sixty-two years old, entered the St. Agnes Hospital complaining of a tumor of the penis. An aunt died of cancer of the stomach, otherwise the family history was clear. The patient had never had syphilis. In 1885 he noticed a small red spot on the inner surface of the foreskin, just back of the preputial opening. This was not hard, and gave very little pain. It gradually spread backward toward the coronary sulcus and became progressively more painful. This continued for five years, the area of ulceration becoming larger and harder. He then consulted a physician, who cauterized the lesion. In the next three years the patient himself used the solid stick of silver nitrate some six times, applying a simple salve afterward. After each treatment the lesion seemed to heal, but again broke down, exposing a hard, protruding nodule in the center. This nodule apparently disappeared after each burning, but later would become more prominent than before. The last application of the caustic was made some three months before the patient presented himself for treatment.

On examination, the patient was found to be phimotic, with slight œdema of the prepuce, adhesions between the latter and the glans of

the upper surface, and a hard, irregular nodule the size of the end of the thumb distinctly perceptible in this region. This nodule extended one quarter of an inch behind the corona. On strongly retracting the prepuce, a hard, projecting mass of what appeared to be indolent granulation tissue was exposed. Neither the inguinal glands nor the dorsal lymphatics of the penis were perceptibly enlarged. In the last six months the patient experienced sharp, lancinating pains and had a slight blood-stained discharge from beneath the foreskin. He gave no



Section of epithelioma of the penis.

history of sore or injury of any kind preceding the development of his lesion.

Operation in this case was performed in the ordinary manner at the middle of the pendulous portion, an inch and a half behind the posterior border of the hardened mass. The spongy body was cut half an inch longer than the cavernous bodies, and the urethra was split and attached above and below to the skin flaps, which were made oval.

I present a drawing of a cross-section of the growth, showing typ-

ical epithelial formation. Ribbon sections were taken of the whole substance of the penis, passing from the center of the growth backward. The line of demarcation between healthy and diseased tissue was, as is usual with epithelioma, rather sharply marked. The cavernous body of the right side was involved to a slight degree, but a quarter of an inch behind the posterior border of the perceptible enlargement the tissues of the penis were found to be absolutely healthy, and the amputated section, of course, showed entire absence of epithelial infiltration—a good example of the slow course of these lesions, the local trouble in this particular case dating back eight years.

Nine months are now past, and the patient is still free from recurrence either in the stump of the penis or the lymphatic glands of the groin. The artificial opening of the urethra has not contracted, and he is troubled only with a stricture of twenty-two caliber, just anterior to the triangular ligament, which he refused to have cured at the time of his operation.

This case, one of seven epitheliomas of the penis that I have seen, I had taken as the text for a general study of epithelial cancer involving the penis; but since the publication of Dr. R. W. Taylor's classical paper upon this whole subject, a general rehearsal of the facts he has so clearly brought forward would be out of place, and I shall therefore confine myself to a very brief discussion of one or two points in relation to this subject which have seemed to me of special interest.

As to the ætiology of the disease, phimosis is almost universally acknowledged to be a strong predisposing factor, and in six of the seven cases I have seen this condition was present before the development of skin cancer. Traumatism is also usually recognized as a predisposing factor, one of the clearest cases of this nature reported being that of Krönlein, quoted by Klebs. Direct contagion is usually denied, but a search of literature recently made by MacFarland showed thirteen cases, eight of them being instances of contagion from the wife to the husband; Sorel's paper upon the contagiousness of cancer; Arnaudet's cases, the contagion being traced to drinking water; and Cornil's report of the transplantation and growth in two patients, all point toward direct contagion. Hahn also observed that cancerous nodules when transplanted to a healthy part of the body grow. Moreover, Fiesinger and Guelliot report some curious cases, showing that a number of persons living in the same locality and under similar surroundings may be attacked with cancer, thus constituting a limited epidemic. When it is remembered how recently the contagious character of phthisis was contested, and at that time how few were the carefully reported cases tending to show this contagiousness, it does not seem

unreasonable to believe that the contagious nature of cancer may one day be as clearly recognized as is that of tuberculosis.

Jacobson, in discussing this subject, quotes Bruce's case. The patient lost his wife from cancer of the uterus, from which she had suffered for many years. In the following year he noticed a small warty growth upon the glans, which subsequently became a typical epithelioma. This case Jacobson states is almost an isolated one, and the apparent connection between the two diseases is only a coincidence. In the light of the evidence now accumulating this view should be modified.

Syphilis has been repeatedly quoted as a predisposing factor in the development of cancer. This ground is scarcely tenable and is certainly not generally accepted, though Demarquay of fifty-nine cases found that ten had suffered from syphilis. I have seen one case in which the history was singularly clear. The patient was thirty-two years old. At the age of twenty-two he contracted a chancre in the coronary sulcus to the right side. This healed in the course of one or two months. The following constitutional disease was light, and was somewhat irregularly treated. A distinct cicatrix was left at the seat of the old chancre. Nine years after the appearance of the primary lesion this cicatrix became inflamed, ulcerated, and shortly formed an irregular, ragged excavation with hard, nodular edges. This was thoroughly cauterized, but even before cicatrization had taken place the lesion again became unhealthy and began to extend. In three months the glans was destroyed and the disease had invaded the cavernous bodies, forming a cauliflower mass above, with a hard, deep ulcer below, which had already opened the urethra. The inguinal glands of the right side were moderately enlarged, but no more so than is often observed in syphilitics. The penis was amputated at the peno-scrotal junction. In a month the wound had become cancerous in appearance and the inguinal glands greatly enlarged. They suppurated, the disease extended along the pelvic glands, and the patient perished from exhaustion twenty months after the first appearance of his disease. Microscopic examination of the tumor showed it to be epithelioma.

I have seen one other syphilitic develop carcinoma. A hurried sketch of this lesion I present to you. There was, however, no clear history of a scar of a chancre, and no relation between syphilis and epithelioma could be traced.

Jacobson reports a case somewhat similar to the one detailed. The patient exhibited the cicatrix of a chancre which twenty-seven years later became a raw surface, it extended from time to time and then healed up. Three years later this inflamed patch became distinctly

warty. It was destroyed by glacial acetic acid, but fresh warts formed at the site of the lesion. A year before the patient's death the sore became indurated and then steadily extended. In these cases I believe the syphilitic virus had absolutely nothing to do with the epithelioma, the scar of the old lesion simply acting as a focus of lessened resistance.

The prognosis of epithelioma of the penis is guardedly favorable. In the precancerous stage—that is, in the stage of continued irritation taking the form of localized balanitis or balano-posthitis, of warty growth which has a tendency to infiltrate and ulcerate, or of circumscribed induration—prompt and efficient intervention will be followed by radical cure in the very large majority of cases. Somewhat later, when the disease is typically developed, the prognosis is less favorable, because the lymphatic glands of the groin are commonly involved, and because by direct extension the disease has traveled so far back that the operations ordinarily undertaken for its removal are insufficient, and recurrence *in loco* takes place. Of Demarquay's one hundred and thirty-four cases recurrence in the scar took place in eight (six per cent). In two of the three operative cases I have seen the seat of section became cancerous. Gussenbauer holds that the inguinal lymphatics are with few exceptions involved very early in the disease. Even though palpation reveals no material increase in size, the microscope will nearly always show cancerous deposits. Thus, of forty-eight cases, involvement of the inguinal glands was found in forty—thirty bilateral, ten unilateral. Even though the lymphatic glands be already enlarged, it is not certain that this is due to infiltration of the cancerous cells. It may be simply inflammatory and may disappear after thorough removal of the cancer. Smith and Demarquay each report a case in which the inguinal lymphatic enlargement entirely disappeared after removal of the diseased penis. Visceral metastases are extremely rare. Winiwarter quotes but six cases.

If untreated the disease is, of course, necessarily fatal, but may run a course of ten years or more. Death usually takes place from hæmorrhage from exhaustion. Operation distinctly prolongs life even when the cancer is so extensive that complete removal of all infiltrated tissue is not possible.

Hildano removed a cancer the size of a child's head from a patient aged eighty years. This man survived for ten years. Lebert and Pitha report four cases of permanent cure. Pitha observed his two cases nine and twelve years respectively after operation. Thiersch reports three radical cures four, six, and seventeen years after operation. Winiwarter reports four cures observed from one to seven years.

Horteloupe reports a case well after four years. He removed all

the inguinal glands on both sides. Southam completely removed the external genitals for epithelioma of the penis and scrotum, with no recurrence at the end of six years. In this last case there was no microscopic examination. Polaillon and Dubuc report the case of a man of fifty-four whose epithelioma had destroyed the penis, involved the subcutaneous tissue over the symphysis, and implicated both cords. The entire external genitals, the mons Veneris, the scrotum, and testicles were removed mainly by thermo-cautery, the urethra being cut off from the perinæum. Nine months later there was no relapse.

Hutchinson reports a case extending along the course of the urethra. The corpus spongiosum was dissected back in order to get to the healthy part. The urethra was brought out through an opening in the perinæum. In spite of this wide section there was recurrence at the new urethral orifice.

An accurate knowledge of the percentage of recurrence after thorough extirpation can scarcely be obtained, since there is a natural tendency to report only those cases which are successful or which present certain peculiarities. Recurrence *in loco* or in the glands is expected as a rule, and when it occurs the case rarely finds its way into literature. Cancer of the penis is comparatively so rare that there is probably no individual experience sufficiently comprehensive to give the required data. In performing the operation, however, I believe we can arrive at a very clear idea as to the chance of radical cure in individual cases by careful microscopical examination of the parts removed. When the penis is amputated cross-sections should be taken at the seat of amputation, and these should be carefully examined for cancerous infiltration. Where the suspicious growth is extirpated, similar examination should be made upon the entire periphery of the growth. Even though these sections show healthy tissue, this of course does not guard against glandular recurrence. I believe, however, that in all cases where the cancer is typically developed the inguinal and lymphatic glands of both sides should be removed and a microscopic examination of these specimens should throw valuable light as to the presence or absence of infection.

As to the operation, this, in the precancerous stage—that is, when the disease can not be clearly recognized as cancer—may consist in thorough cauterization, or in excision followed by cauterization. In case the wound does not heal kindly, amputation of the penis should be performed at once. If cross-section shows involvement at the point of amputation, extirpation is indicated. In the latter case, when there are any remains of virility, castration is also advisable, but not when partial amputation is performed. I have seen one patient amputated at the

peno-scrotal junction in whom an amount of erection was obtainable which, according to his own statement, was not only a source of satisfaction from a cosmetic standpoint, but which also enabled him to continue his conjugal relations with satisfactory results. In all cases where the amputation of the penis is required I believe the groin should be opened freely and the entire chain of lymphatic glands should be removed whether they are enlarged or not. This operation, if performed before there is extensive periadenitis, is perhaps a trifle tedious, but is perfectly safe and is not difficult.

The two points to which this paper was designed to call especial attention are :

1. That it is not justifiable positively to deny the possibility of contagion in epithelioma of the penis.
2. That when amputation of the penis is required the inguinal glands of both sides should be dissected out, even though they are not appreciably enlarged.

LEUCOPLASIA AND ITS RELATION TO SYPHILIS.*

By G. FRANK LYDSTON, M. D., CHICAGO,

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LESIONS of the mucous membranes in early syphilis are so characteristic and so intimately related to the active period of the disease that even general practitioners are not only familiar with their pathological characters, but to a considerable degree also with their treatment. The sequelar or so-called tertiary lesions of the disease are, however, not well understood, despite the fact that they are of far greater importance, inasmuch as the earlier lesions have an intrinsic tendency to recover, other things being equal, while those of a later period are characterized by extreme chronicity and a stubborn tendency to recurrence. It is not my intention to discuss the ordinary ulcerative mucous syphilides of late syphilis ; they are fairly well understood, and the principles governing their treatment are identical with those of ordinary gunny lesions.

We meet with lesions of the mucous membranes late in the history of syphilitics which are of all the late lesions of the disease the most typically sequelar, inasmuch as they are the result not only of syphilis

* Abstract of a clinical lecture delivered at the Masonic Hospital.

per se, but of numerous other factors to which the mucous membranes are exposed during the active period of the disease, or during the intermissions between the active manifestations. The post-syphilitic character of the lesions in many instances is so marked that ordinary anti-syphilitic treatment either has no effect whatever or is injurious. The lesions to which I refer occur in the form of hyperplastic infiltrations of greater or less extent of the mucous and submucous tissues. These have been classed by different authorities as leucoplakia, by others as leucoplasia—terms which are intended to convey the characteristic whitish appearance of many of them and their tendency to arrange themselves in distinct hyperplastic plaques. The term post-syphilitic leucoplasia is probably as comprehensive and accurate as any that have thus far been suggested. The terms psoriasis, ichthyosis, tylosis, leucokeratosis, dyskeratosis, and hyperkeratosis serve simply to add confusion to the subject.

Very thorough studies of post-syphilitic leucoplasia have been made by such eminent authorities as Kaposi, Besnier, Doyon, Perrin, Schwimmer, Trélat, Reclus, and Terrier. Perrin believes that the white hyperplastic plaques, presenting themselves as syphilitic or post-syphilitic phenomena, have for their elementary characters functional and organic disturbances of the epithelium. He believes that they may occur as a consequence both of the syphilis and antisyphilitic treatment. He thinks, however, that in some instances there exists some peculiar morbid constitutional condition or diathesis as the predisposing cause of leucoplasia. He calls attention to the well-known fact that such conditions are peculiarly liable to occur in both syphilitic and non-syphilitic patients who are addicted to tobacco. He recognizes also a large number of cases of a mixed character in which the condition is excited by syphilis and tobacco in combination in subjects with a gouty or rheumatic tendency.

It may be a question whether leucoplasia should be classified as a distinct pathological entity, but most of those who have had the opportunity of observing a few cases of the kind will hardly question the assertion that the lesions present certain traits which are sufficiently characteristic to warrant such a classification. From a clinical standpoint there can be no question of its accuracy.

With reference to the relation of syphilis to leucoplasia, however, the occurrence of cases of leucoplasia independently of that disease must be taken into consideration; indeed, when we consider the large proportion of syphilized patients who indulge in tobacco and liquor with or without overactive mercurial therapeutics, it is rational to infer that even in the cases in which syphilis appears to be primarily respon-

sible for leucoplasia the affected individual must be possessed of some peculiar predisposition which quite distinctly differentiates him from the average syphilitic. In several instances I have had my attention directed to the question of idiosyncrasy as an explanation for the occurrence of leucoplasia by the occurrence of such lesions in several syphilitics who happened to be blood relations. I have at the present time under observation two brothers whose cases have given me a great deal of annoyance on account of the stubborn tendency to recurrence of leucoplastic lesions upon the tongue. I will at this point advance the proposition that post-syphilitic leucoplasia derives its chief importance from the fact that, while its dependence upon syphilis is usually recognized, the mistake is made of believing that the lesions should be quite as tractable under antisymphilitic treatment as other lesions of the mucous membranes occurring in this disease. As a matter of fact, these lesions must be regarded essentially as non-syphilitic neoplasms occurring upon a syphilitic foundation. With this in mind the practitioner may perhaps readily comprehend the correct principles of treatment. Forgetting this, he is likely to do the patient incalculable injury through misguided and enthusiastic efforts to cure the lesions by strictly anti-syphilitic treatment. Ordinary local treatment simply aggravates the difficulty as a rule, and only the most radical measures are likely to have any effect. A further reason for regarding these lesions as of considerable importance is the indubitable fact that they present a decided tendency to assume a malignant character.

I reported some years ago a case in which post-syphilitic neoplasia of the tongue became eventually transformed into malignant disease.* I shall never cease to regret the fact that the principles which I now recognize as correct in the treatment of these conditions failed to impress themselves upon me at an early period in the history of this case, as I feel confident that by radical measures of treatment I might have prevented the lamentable outcome of the case.

The condition underlying leucoplasia of a post-syphilitic character does not always develop distinct white plaques of hyperplastic epithelium. The same local perversion of nutrition may develop fissures of greater or less depth and extent, with margins of hyperplastic epithelium, or the edges of which may have become transformed, presenting a smooth, glazed, and dry appearance, the characteristic papillated appearance of the tongue being replaced by a smooth quasi-mucous surface. In other instances distinct ridges of greater or less extent present themselves, particularly along the edges of the tongue or the

* *Trans. Miss. Valley Med. Assoc.*, 1890.

inner surface of the buccal mucous membrane at the point of contact of the tongue and cheek with the teeth. This form of epithelial hyperplasia is particularly apt to occur in patients who have been over-treated with mercury. We find in other instances the classical type of leucoplastic formation in which more or less elevated, distinct, whitish plaques of epithelial overgrowth are noted. The epithelium of these plaques may undergo transformation and present a smooth, reddened, glazed appearance, such as has already been described in connection with fissures. The cases in which the epithelium is transformed in this manner are characterized by extreme irritability, lesions which are trivial in appearance giving rise to considerable irritation and pain. Excessive smokers are particularly apt to present lesions of this character.

A more formidable variety of post-syphilitic neoplasm occurs in the form of distinct circumscribed nodules of greater or less extent which have a tendency to develop along the margins of the tongue, but are often seen upon one or the other side of the lingual raphe, and in some instances limit themselves entirely to the base of the tongue upon one or both sides. These lesions are very apt to be mistaken for gummata. I have no doubt that in some instances nodular gummy infiltration is the point of departure for the lesion, but instead of resolution, suppuration, or necrosis occurring, the gummy deposit is apparently removed or transformed—at least, it is replaced by a distinct connective-tissue new growth. This may subside to a certain extent, but is very likely to remain permanently and to enlarge from time to time, each successive exacerbation being followed by a greater degree of permanent enlargement. Such nodules are to be regarded as extremely dangerous, as it is this form of post-syphilitic mucous lesions which is most likely to undergo malignant transformation. I will state at this point that the lesions above described have long been to my mind the most conclusive evidences in favor of the theory that the post-syphilitic phenomena are largely of the nature of tropho-neuroses. Tropho-neurotic disturbances of a permanent character associated with various causes—as local irritation of the mucous membranes, etc.—should, it seems to me, be all-sufficient to explain the peculiarities of the lesions under consideration.

Even a superficial study of these lesions should be sufficient to convince the practical clinician of the fact that it is but a step between these benign overgrowths of epithelial and connective tissue to a malignant type of neoplasm. I have come to regard the nodular variety of the affection as essentially “precancerous,” and I believe that in this view alone can the safety of the patient be said to lie.

In the treatment of leucoplasia of the mucous membranes several factors must be taken into consideration.

1. The possible existence of a certain degree of activity of the original constitutional trouble—syphilis.

2. The question whether the syphilis *per se* has not long since been eradicated, as a consequence of which eradication antisiphilitic treatment will simply add fuel to the fire.

3. The relation of previous antisiphilitic treatment (particularly in the direction of overdosing with mercury) to the lesions present.

4. The existence of tropho-neurosis, either as a result of the syphilis, its treatment, or more probably of idiosyncrasy.

5. The relation of local irritants, such as tobacco, liquor, highly seasoned food, and the application of caustics.

6. And most important of all, the circumstance that the lesion may require attention as a distinct neoplasm independently of its relation to any of the foregoing factors, with the distinct object in mind of preventing a possible or even probable transformation into malignant disease.

In deciding the question of the administration of antisiphilitic treatment in leucoplasia, considerable discrimination is necessary, particularly in the direction of estimating, as accurately as possible, the relation of other factors than syphilis to the pathological condition under consideration. It will be found in these cases that, as a rule, the proper course of antisiphilitic treatment is rather tonic than radical. In these late cases small doses of the bichloride of mercury, in combination with the tincture of cinchona bark, are much safer, particularly when used tentatively, than the larger doses which are commonly given in the earlier and more active stages of the constitutional disease. It may be found that even a moderate amount of mercury will aggravate the lesions of the mucous membrane, and under such circumstances tonics uncombined with mercurials are indicated. I will suggest in this connection the use of the various preparations of gold as tonic alteratives. The liquor arsenii et hydrargyri bromidi (Barclay's formula) is an excellent preparation. A very useful combination of alteratives and tonics is the preparation introduced by the Renz and Henry Pharmacal Company, of Louisville, known as the three chlorides. The dose of mercury in this preparation is so small that no evil effect need be feared. Where syphilis is believed to be still active, I rather incline to inunctions of the mercurial ointment in combination with large and increasing doses of the potassium iodide, given with great caution, keeping in mind the possible debilitating effects. It will be found that the majority of cases are anæmic, consequently

all radical measures for treatment should be carefully guarded by the judicious administration of nutrients and tonics. Cod-liver oil in combination with a pure wine, or in some cases a moderate amount of good brandy or whisky, may be indicated. There are occasions when alcoholics are highly advantageous in syphilis. This fact is too often disregarded by the majority of practitioners. The keynote of treatment of the post-syphilitic and late syphilitic phenomena is the administration of tonics in the majority of cases, rather than vigorous antisyphilitic treatment.

With regard to the use of tobacco, and also of liquor, with the possible exception above mentioned, there should be no compromise. Complete abstinence must be insisted upon.

With reference to the application of caustics, I will simply say that any form of caustic which is not immediately and thoroughly destructive simply serves as an irritant, and enhances the pathological condition present. Superficial caustics, such as the nitrate of silver, should be avoided. The local use of antiseptic and astringent washes is very often beneficial, and, unless used in too great strength, can not possibly be harmful. As far as the various forms of antiseptics and astringents are concerned, there is practically little choice as long as the principle of antiseptis is subserved.

In conclusion, I will state that, from my own clinical experience—some of which has been of a rather unpleasant character—I have been led to conclude that, in cases which show a tendency to stubbornness or a tendency to recurrence, but one form of treatment is to be considered, and this a most radical one. In every case which has come under my observation for some time past I have practiced free excision with the knife or scissors, followed by the application of the actual cautery. In some cases I have used the actual cautery alone. There should be no hesitancy in the thorough application of these measures, and from an operative standpoint I believe it is best to regard these lesions as essentially malignant, complete and thorough destruction or excision being consequently indicated. Half-hearted destruction or excision is worse than no treatment at all, as is true of genuine malignant neoplasms. Should a case present itself in the transition stage, or after malignant characters have asserted themselves, the case should be treated as we ordinarily do malignant disease elsewhere. There is a question in my mind whether these cases are not more unfavorable than ordinary malignant diseases of the mucous membranes of the mouth, on account of the syphilitic dyscrasia or the post-syphilitic anæmia and debility which are so characteristic of over-dosed patients.

A CASE OF KELOID FROM AN UNUSUAL CAUSE.

By J. BLOCK, M. D.,
Kansas City, Mo.

THE subject of the case presented is one remarkable for several reasons. Though a young woman in the beginning of her teens, she has had the unusual experience of suffering from a lightning stroke upon two different occasions—a period of four years intervening—and is now the bearer of a number of keloids, the result of her last encounter with Nature.

When but ten years of age, then residing upon a ranch in Texas, she was stricken during a storm, being engaged at that time in some domestic duty with a large spoon in her hand near a stove. Though stunned and unconscious for some time, the effect was limited to a transitory paralysis of one of her arms. The details of the lesion were not obtainable.

Miss C. is now a young girl fourteen years old and of unusual development for her age, excepting her face, presenting the appearance of a miss four years older. She is not only well developed but well nourished, and without any visible evidence of disease save the dermic lesion which we shall now describe. The family history is excellent, and without data pointing to heredity.

While driving in a country wagon, in company with a number of others, to participate in some festivity at a neighboring ranch, the party was caught in a violent thunderstorm, and, though partially sheltered by a canopy, a sheet of lightning struck the vehicle, stunning a number of the passengers and killing the driver's dog.

Miss C. remained unconscious a number of days after the accident. Her clothing was burned at the time she received the injury.

As near as could be learned during the consultation in the absence of any accompanying relative, convulsive seizures, sensory and motor paralysis more or less complete, were the immediate consequences of the injury, all of which have, however, disappeared. The precise nature of these effects and their location could not be ascertained. Recovery was complete, however, no trace of a nervous disorder appearing upon examination.

From the photographs which I present the limits of the burn are readily discerned. The posterior aspect of the neck, the upper part of the back, including more than the internal half of the right shoulder down beyond the angle of the scapula, in an irregular manner extend-

ing slightly beyond the median line toward the left, with a slight patch at the apex of the right posterior lateral axillary fold, describe the limits of the upper part of the body included in the lesion (Fig. 1).



FIG. 1.

Upon the left lateral aspect of the neck a blackish imprint marks the segments of a gold chain worn at the time, which were melted into the skin ; these appear in a double parallel row (Fig. 2). The skin

in all its layers appears to be well preserved without any palpable unevenness in consequence of the imbedding either of the metal or particles of its sulphide.

Below, the borders of the burn are described by an irregular line beginning above the crests of the ilia extending down and including part of the nates, being broader below than above, and well within the limits of the posterior aspect of the trunk.

An inspection of the surfaces described shows the burn to have been superficial, involving only the upper tegumentary layers, there being no scarring.

It is difficult to say whether the discoloration is due to the residuary pigmentation or to the iodine applied for the relief of the affection.

Above, at the lower border of the line described, we find two distinct firmly elastic tumors of oval form; another at the apex of the right posterior lateral axillary fold; and still another upon the acro-



FIG. 2.

mion, covering an area each varying from the size of a pea to a pecan. Their coloring was purplish red, and they were elevated above the skin from an eighth to almost a fourth of an inch; somewhat painful to the touch, and only movable with the skin and distinctly defined.

Below, above, and to the right of the internatal fold there was an irregular mass of similar color and projection distributing clawlike processes in an arborescent manner. Below and to the left the skin was rough and indurated, purplish red, but not much elevated above the surface. The distribution is well shown in the photograph (Fig. 1).

The surface of the keloid below was smooth and glistening, though the mass seemed composed of a number of nodules. Above, the tumors were smooth and shining.

From this brief description it is apparent that the new growths were not developed upon a scar, the burn having been entirely superficial. Interrogation proved this to be true. The entire area healed smoothly without a cicatrix, the keloid developing a number of months subsequently.

Though these could not be considered so-called idiopathic keloids, they certainly were not scar keloids, if this classification still obtains. The lesion was annoying only because of the burning and itching.

A lotion of carbolic acid, calamine, and limewater somewhat allayed the itching and burning. Electrolysis was advised, and her physician in New Mexico requested to make the experiment.

Some months after her departure I received a letter from her physician, Dr. C. B. Kohlhausen, of Raton, N. M., who stated that the itching having again become intolerable, an ointment composed of campho-phenique and vaseline, with the induced current daily, brought complete relief from this symptom.

He also stated that, having little faith in electrolysis, if everything else failed he would resort to excision with skin grafting, well knowing its tendency to return after removal.

RAPID GROWTH OF A NÆVUS VASCULOSUS.

By BURNSIDE FOSTER, M. D.,

Surgeon to the Skin and Venereal Department of the St. Paul City and County Hospital;

Dermatologist to St. Joseph's Hospital; Dermatologist to St. Luke's Hospital;

Visiting Physician to the St. Paul Free Dispensary, etc.,

St. Paul, Minn.

WALTER J., twenty two weeks old. The subject of the accompanying illustration is an interesting example of the rapid growth of a *nævus vasculosus*. At birth nothing was noticed on the skin. When the baby was two days old, a minute red spot appeared above the right eyelid which rapidly increased in size. Operative interference (electrolysis) was advised, but the mother, an ignorant woman, refused to have anything done. The case was not seen again for five months, when the condition as shown in the photograph existed. There were several gangrenous places in the growth, notably one involving the ear, which was almost entirely destroyed.

The mother states that for the last four weeks there has been no extension of the growth. I have no doubt that this could have been safely and completely destroyed by electrolysis when first seen, and thus a



horrible and incurable deformity prevented. In view of the possibility of rapid growth presented by this case, I believe that a *nævus*, no matter how small, anywhere on the exposed parts of the body, should be destroyed at once.

Correspondence.

SYPHILOGRAPHY IN FRANCE.

Hypodermic Injections of Mercurial Substances in the Treatment of Syphilis.—Although I have already treated upon this question some years ago in my correspondence, the importance of some communications which have just been made upon this point in the Lyons session of the French Dermatological and Syphilographical Society obliges me to recur to it. Dr. Augagneur, charged with the report, has, it seems to me, marvelously well laid down the terms of the problem which is to be solved. He began by establishing the fact that the subcutaneous method should be only a method of exceptional

employment. The greater number of syphilitics have no need of other treatment than the classical treatment by mercurial pills, which is sufficient, without danger, without inconvenience, and not requiring the intervention of the physician. There are besides serious reasons for not admitting the subcutaneous injection method excepting as a method for unusual cases; these are the severe accidents to which, in a strict sense, they can expose the patient. Among these the author mentions a condition of malaise going into syncope at the moment the injection is made, persistent pains showing themselves long after the injections; the formation around the foreign body deposited in the tissues of an inflammatory zone which is painful to shocks and on motion; muscular paralyses; frequent and long-continued abscesses; accidents of embolism when one employs as a vehicle liquid paraffin; depression, dyspnoea, stitches in the side, accessions of cough after the injection; severe mercurial intoxication, which at times necessitates surgical extirpation of the focus of injection, and which in a number of instances seems to have even determined death. We must then strive to lay down the indications for the hypodermic method so as to employ it only when it is absolutely necessary. Now, there is no trouble in showing that this method only in part bears out the hopes founded upon it when it was claimed that by its employment the absorption of the mercury was rapid, regular, and constant. According to the author, there is only one indication well established for the use of mercurial preparations by the hypodermic method, and that is the failure of inunctions. When the latter seem not to act with sufficient rapidity in a case of gravity, we should resort to it. We may equally employ it at the onset in cases of cerebral syphilis when the indications for immediate intervention are pressing.

Dr. Augagneur's report provoked a most passionate discussion. The partisans of the method affirmed its efficacy and its harmlessness. Dr. Thibierge made known the results of his experience at the St. Louis Hospital in the service of Dr. Besnier, whom he replaced for some time. He has only made a few injections of calomel, of which he recognizes the real and very rapid efficacy, but which have seemed to him too painful to be adopted as a unique method of treatment for syphilis, and he has employed especially injections of gray oil. He employs for this purpose a gray oil prepared after a special manner by Dr. Milbet according to the following formula: "Shake in a glass retort holding three hundred cubic centimetres, washed with alcohol, thirty grammes of purified mercury and five grammes of ethereal tincture of benzoin. Decant the tincture and replace it with ten grammes of ether. Shake again, and wash this with ether several times until the supernatant liquid is no longer colored with the benzoin held in dissolution. Pour out the mercury into a mortar, wash carefully the retort with ether, so as to take up all the mercury it contains. Triturate first with thirty grammes of white vaseline which has been melted by aid of a mild heat. When the mass has become cooled sufficiently to have a consistence of pomade, add little by little in triturating forty grammes of liquid vaseline. Mix carefully until a little of the oil thus prepared no longer shows under a magnifying glass any globules of metallic mercury when examined either directly or after being spread out upon a sheet of unsized black paper. The product is shut up in a bottle which has been washed with alcohol and stoppered with emery. Gray oil thus prepared is sufficiently fluid, and contains exactly and exclusively mer-

cury and vaseline in the proportion of thirty of mercury to one hundred of the gray oil. Dr. Thibierge makes each week an injection of three drops of this oil, with all the most minute antiseptic precautions in taking care not to inject into a vessel. Out of one hundred and fifty injections made in this way he has had only two abscesses, which occurred in young women. Usually these injections cause deep-seated nodes, which last for five to ten days; they are hard and painful to pressure, and some have been followed by pains either spontaneous or called forth by motion. According to the general rule, however, these pains have never been sufficiently severe to compel the patient to remain in bed. He has only seen intense stomatitis occur in one case. On the other hand, he has obtained the most remarkable therapeutic results, and much superior as to rapidity to those which the habitual internal treatment gives. In employing, as Dr. Balzer had recommended to him, small quantities of the preparation, he remarked that one protected himself from the inconveniences resulting from the accumulation in a given point in the organism of a quantity of mercury whose absorption could not be regulated. He therefore thinks that this method merits a particular confidence in severe syphilis, especially when rebellious, and in all cases where treatment should be rapidly pushed.

Dr. Jullien, as is well known, is a convinced and ardent partisan of calomel injections. He came to their defense in an energetic plea, of which we can give the following short account. The usual method of administering mercury by the digestive tube is untrustworthy, because we never know what quantity of the mercury is absorbed, nor, indeed, if any is. It is a dangerous method, for the mercury irritates the digestive tube, and may occasion intestinal disturbances and hæmorrhages, increased development of micro-organisms, which exist habitually and normally in the intestines, and consecutively ulcerations and necrosis. Mercury introduced by the intestine gains entrance at first to the portal vein, and hence the liver, whose function it is to retain the greater part of metallic substances, and thus it prepares the alterations of this organ, at the same time that the liver attenuates the action of the mercury. All these inconveniences are avoided when we administer mercury by the hypodermic method. The rapidity of the action of this remedy when we administer it in this way is superabundantly proved. When injections of calomel are made we find mercury in the urine two hours after the injection. Therefore when it is a question of an accident about which there is doubt, but for which operative intervention is required unless it be shown to be of syphilitic nature, we must at once resort to calomel injection. He thinks that we are able by this procedure, employed in the very onset, to obtain the extinction of syphilis and produce a veritable abortion of the disease. As to the accidents caused by the injections, they do not exist for him. Those which have been published are due to regrettable errors on the part of the physicians, who have not properly employed the method.

Dr. Stoukovenkoff (of Kiev, Russia) has made two very important communications on the same subject, from which we extract the following: He thinks that when we introduce into the tissues of the organism mercury in its metallic form, even when in a finely divided state—as when, for example, we employ it under the form of gray oil—its curative effect is very feeble, and recurrences of the disease show themselves in a more severe form than the initial accidents indicated; they are accompanied by intense mercurial stoma-

titis, and characterized by the presence of mercury in the urine, in quantity more considerable than at the time of the suspension of treatment in the great majority of cases. Thus, in making use of this method, the mercury exercises an injurious action upon the organism and upon the course of the syphilis. The author thinks the cause of this aggravation of the condition of the patient lies in the fact that the primary deposits of mercury continue to furnish metal to the blood after the syphilitic phenomena have disappeared, and thus produce an increasing impression upon the economy in attacking its forces, and in favoring by it the development of syphilitic accidents of a most severe nature. He thinks, then, that we must use, in subcutaneous injection for syphilis, soluble mercurial compounds not coagulating the albumin of the tissues, and consequently not having a tendency to form a coagulum in the organism, which is only absorbed little by little by the blood, and this only very imperfectly. Indeed, when we employ salts not coagulating albumin, and changing after their introduction beneath the skin more or less completely into a combination absorbed at once by the blood, we obtain more complete therapeutic effects with doses comparatively more feeble; we find the presence of mercury in the urine sooner and in larger quantities; the metal is not retained in the organism, and it does not accumulate in the blood at the time treatment is stopped. It does not form a coagulum, nor induration at the point of injection. Dr. Stoukovenkoff regards the benzoate of mercury as the type of salts of this order. It is far superior to sublimate, although less rich than it in mercury. Indeed, the ideal plan would be to inject the mercury directly into the veins, but he is not yet sufficiently convinced of the innocuousness of this method to be willing to try it.

These various communications were followed by a quite confused discussion in which Dr. Balzer recalled his work upon this question and the brilliant results which he obtained and which he still obtains in his service at the Midi Hospital by the injection of mercurial compounds which are insoluble. Out of a thousand injections made in three years he has only had a single abscess, and here there was a question in this case of negligence, for the needle had been badly cleaned. The rigorous antiseptic precautions advised by some authors are, according to his views, not necessary, it being sufficient to be cleanly. Dr. Barthelemy is also a convinced partisan of the injection of insoluble mercurial compounds, with which he has obtained excellent therapeutic results after having failed with other methods in tertiary affections of the tongue, in severe ocular lesions, in women who begin a pregnancy when they have aborted from syphilis before, and in prostitutes, who thus carry away with them the continuation of their treatment when they go out from the hospital. On the other side, Dr. Verchere, Dr. Cordier, and other syphilographers agree with Dr. Augagneur that this method should truly be regarded only as a method for exceptional instances, and should only be employed when other means have failed.

Therapeutic Strategy in the Treatment of Syphilis.—In some most interesting lessons by Dr. Mauriac, the syphilographer of the Midi Hospital in Paris, he has pointed out what is the plan of campaign which he advises to be followed to combat syphilis. This is what he calls his "therapeutic strategy": He begins by laying down the principle that during the incubation of the infecting chancre it is perfectly useless to institute treatment. It is probable that, given in this stage, the mercury and the iodide hinder noth-

ing; but there is another reason of major importance: How are we to know that one is contaminated, and how can we care for a disease of which we ignore the existence? On the other hand, he establishes it as an invariable rule that we must begin specific medication as soon as there no longer remains any doubt upon the nature of the primary sore. The impression left from his long practice is, that cases of syphilis which have not been treated from the very first appearance of the chancre present during the secondary period an exuberance and an intensity greater in their manifestations than those which from their incipency have been regularly subjected to mercurial medication. They are more rebellious, more subject to recurrences, less manageable, and less easily subjugated by specific agents. He exacts that the initial lesion should be absolutely characteristic in beginning treatment. If the diagnosis is doubtful, we must await the appearance of undeniable accidents before giving mercury. If one acts otherwise, he exposes himself to the error of treating one who does not need it—of altering his health—and especially does he expose himself to an uncertainty as to the reality of the infection. Now, it is of the utmost importance for the subject to really know whether or not he is syphilitic, and especially for the future. As soon as secondary manifestations appear, treatment must be carried out in the most absolute manner and vigorously persisted in. Dr. Mauriac advises to institute, for four or five months at least, a most energetic medication. However, we must know how to proportion it to the forces of the subject and to the gravity of the case, and we must not think that we can always give the same formula and carry out in an unchanging manner the same practice in all cases without taking into account the very great differences that the clinical analysis permits to distinguish the one from the other. One of the general principles which dominate the treatment of syphilis is that the medicines should be administered in an intermittent manner. So that the organism shall not become habituated to mercury and the iodide of potassium, we must suspend them from time to time. These periods of repose need not be very prolonged at the beginning of syphilis. This affection, however, proceeding itself in an intermittent manner and by successive explosions, seems to invite us to institute an intermittent treatment. We must especially profit by the moments of calm which the disease presents to interrupt treatment. Accordingly, as we advance, the instants of repose which the disease shows become longer and longer, and we can thus, little by little, lengthen the intervals without treatment from one to two weeks up to intervals of one or two months. It is quite natural to take the syphilitic exanthemata as serving for a base of therapeutic intervention. Their appearance and their duration indicate when treatment must be taken up again, and how long to continue it. When specific treatment has triumphed after one or two years over the visible manifestations of the infection, we must still take it up from time to time in view of a latent infection. But here there are only uncertainties as to the frequency of these periods of rest, of their duration (a month, six weeks), the doses of medicine that should be administered, and the mode of giving it—indeed, we can only advise mercurial courses more and more interrupted as we recede from the *début* of the disease. We should also keep a certain account of the changes of season, for the passage of winter to spring and of fall to winter are quite often marked by a reappearance of specific accidents. When we have to do with a syphilitic who has married before the probable

term of his virulent period—before the expiration of his third year (Mauriac)—we must institute a treatment of the most active kind ; for the mercury exercises an incontestable preventive action from the point of view of hereditary transmission.

L. BROCC.

PARIS, *January 2, 1895.*

Society Transactions.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY : STATED MEETING, JANUARY 8, 1895.

L. BOLTON BANGS, M. D., *Chairman.*

Hydrocele of the Cord Mistaken Fourteen Years for Reducible Scrotal Hernia.—DR. W. B. DE GARMO reported a case of this kind. He said that for three weeks previous to his first seeing the patient the latter's family physician had been making various attempts at the reduction of the tumor, but without success. During this time there had been three attacks of orchitis. The history was that the patient had had scrotal hernia on the right side for fourteen years, and that for the most of this time he had been able to retain it with a truss. When first seen by the speaker, there was a large, hot tumor in the scrotum, which he believed at that time consisted of inflamed omentum. At the operation he had found a thick sac containing nearly a pint of gelatinous fluid, and attached to this a smaller cyst of the same kind. At the bottom of the sac was a small nodular testicle. As this organ presented a suspicious appearance, it was thought best to remove the testicle. After the removal of the cysts, it was found that, although the external ring appeared to be dilated, there was no hernial sac to be found. The external ring was then closed, and the patient made a satisfactory recovery.

The speaker said that in the report that he had received from the laboratory of the Post-Graduate Hospital the diagnosis had been made of hydrocele of the cord and tunica vaginalis. He had seen many reducible hydroceles, but none which had been retained by a truss, as appeared to have been the case from this patient's history.

DR. F. TILDEN BROWN was inclined to believe that the tumor had simply been diffused over the tissues by the truss, and had not really been reduced and retained.

DR. ROBERT W. TAYLOR said that the condition was a rare one, and had been described as long ago as 1839 as "hydrocele bilocularis." He had seen such a case many years ago. The present one was peculiar on account of its being associated with hydrocele of the cord.

DR. THOMAS H. MANLEY said that such cases were particularly interesting to the diagnostician. The case under discussion presented another feature—development at a comparatively late period of life.

DR. S. ALEXANDER said that he did not think the evidence that the tumor

had been reducible was very conclusive, but, supposing this to have been the case, one would have expected from the gelatinous nature of the fluid that the inguinal canal would have been markedly dilated.

Latent Gonorrhœa in Women.—DR. W. R. PRYOR read a paper with this title. (See page 89.)

DR. C. W. ALLEN said that in an investigation which he had made some years ago, he had found the gonococci very frequently present in the discharges from the cervix and urethra. He constantly saw gonorrhœa in the male, originating from a gonorrhœa in the female of which the latter was apparently ignorant.

DR. J. A. FORDYCE thought that all must have seen latent gonorrhœa in the female give rise to acute gonorrhœa in the male, but latent gonorrhœa in women less frequently produced acute gonorrhœal manifestations in themselves. Although he had seen women after confinement develop subacute forms of pelvic inflammation, he had never seen any acute gonorrhœal inflammation of the cervix or vagina follow the traumatism of parturition. He referred to a peculiar case seen by him last year at Charity Hospital. The patient developed acute gonorrhœa when six months pregnant, and during its course her temperature ranged from 99° to 105° for about ten days; at the end of this time she miscarried. The fever persisted for some days after the miscarriage. The attending obstetricians of the hospital, as well as himself, had examined this patient, and had been unable to find any other pelvic condition to explain the continued fever except the gonorrhœal inflammation of the vagina and cervix.

It should be remembered that every case of severe conjunctivitis in the newly born is not gonorrhœal.

DR. F. T. BROWN said that he had been impressed with the large number of women in whom the author had found no gross evidence of disease of the genital organs, and yet in whom scrapings from the cervix had revealed the gonococci. Within the past few days he had examined a young woman who stated that she had had gonorrhœa last August and had infected her lover. Since she had been cured of this, he had complained on several occasions that she had reinfected him. The os appeared perfectly normal, and nothing could be squeezed from the urethra. The examination of a little mucus aspirated from the cervix showed gonococci. It had seemed to him from this examination that in all probability the discharge might become infectious at certain times—e. g., after coitus. As the man claimed that his symptoms had developed the day after intercourse, it was not improbable that he was suffering from a posterior urethritis.

DR. ROBERT W. TAYLOR said that he did not believe that gonorrhœa was quite as prevalent among the higher orders of the middle classes as some would have us suppose. Wertheim and other German observers were particularly prone to extreme views on this point. He believed that Dr. Brown was correct in supposing that in the case he had reported the acute symptoms were due to the existence of a posterior urethritis.

DR. P. A. MORROW thought that a latent gonorrhœa must assume an inflammatory type before it could become a source of contagion. Before anything was known of the gonococcus, clinicians often asserted that leucorrhœa was a not uncommon source of urethritis, especially when such a discharge had been rendered purulent by excessive indulgence in alcoholic liquors or

sexual intercourse. In his opinion, gonorrhœa was frequently communicated by women who apparently had no purulent discharge.

DR. GEORGE E. BREWER said that his experience had taught him that it was not necessary for the woman to have an acute exacerbation to make her capable of infecting others. Six years ago he had treated a man for some slight urethral trouble, and had entirely cured him. He continued to have relations with a respectable woman, and without other exposure finally developed an acute gonorrhœa. There was nothing to be found in the woman but a slight cervical discharge and some redness of the mouths of the vulvo-vaginal glands. She also gave a history of having had two or three attacks of pelvic peritonitis about ten years previously. The case was looked upon as one of latent gonorrhœa. Some months later he had learned that this woman had died after an operation on a gonorrhœal pyosalpinx. He would like to ask Dr. Pryor if inflammation of the vulvo-vaginal glands or the urethra, with suppuration, occurs from any other cause than gonorrhœa, and also if the Fallopian tube was not often the seat of a gleet inflammation which might become acute just as it did in males.

DR. S. ALEXANDER believed that there were cases of latent gonorrhœa in men, in which acute symptoms would develop when there was any defect of the urethra, and that there were cases in which males developed acute symptoms as a result of intercourse with women having latent gonorrhœa. It was often impossible, however, to state whether the acute symptoms in the male were due to auto-infection or to infection from a woman having the latent form of the disease.

DR. B. E. VAUGHAN thought sufficient attention was not paid to the rôle played by the resistance of the tissues. It was now known that gonococci grew more luxuriantly in acid media—a fact which received clinical confirmation in the development of gonorrhœa in dissipated persons, whose systems were usually abnormally acid. He did not think it was possible for any one to say from simple inspection whether or not a given discharge was gonorrhœal.

DR. PRYOR, in closing the discussion, said that undoubtedly the immense venereal clinics from which the Germans drew their conclusions tended to make them extreme in their views regarding the prevalence of gonorrhœa. He believed that vulvo-vaginal abscess and urethritis were ordinarily due to the gonococcus. What was now designated as chronic purulent salpingitis was practically the same condition described in the male under the term "gleet." In these cases the tubes were not greatly distended and the walls were not infiltrated. The resistance of the tissues was certainly a most important factor in connection with infection with gonorrhœa. In the treatment of gonorrhœa in women, chloride of zinc, carbolic acid, and similar agents, and even amputation of the cervix, had failed to give satisfactory results until he had combined with the treatment a course of systematic packing of the vagina with gauze, so as to prevent any possibility of a fresh infection.

THE NEW YORK DERMATOLOGICAL SOCIETY.

238TH REGULAR MEETING, HELD ON TUESDAY EVENING, NOVEMBER 27, 1894.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Nævus Lipomatodes.—See page 66. Presented by DR. JACKSON.

DR. FOX expressed the opinion that the use of the electrolytic needle, with time and patience, would cause the nævus to disappear.

DR. KEYES advised excision and skin-grafting.

DR. BULKLEY thought that a good deal of the growth could be removed with the curette.

DR. SHERWELL, Drs. Robinson, Fordyce, and Lustgarten advised surgical interference.

DR. ALLEN also recommended excising the growth in the neck. He did not think skin-grafting would be necessary, as the tissues in this region are so lax that the edges of the wound could be readily brought together.

DR. FOX, in reply to Dr. Bulkley, said he has found it extremely difficult to curette these warty growths, as in some cases they are very tough and leathery.

DR. JACKSON, in closing the discussion, said that his own idea was to excise the nævus, and then employ skin grafts, if necessary. It was too extensive for successful treatment by electrolysis.

A Case of Keratosis.—Presented by DR. S. SHERWELL.

The patient was a male, aged twenty-eight years, a native of the United States. His general health is very good; there is no history of syphilis, either congenital or acquired. He came under observation on November 7th, complaining of certain small callosities on the ball of the foot; similar lesions have since appeared on the sole of the opposite foot. The lesions are small, discrete in character, and very painful; in appearance they are very similar to syphilitic clavi. Dr. Sherwell said he regarded the case as one of keratosis, idiopathic in character.

DR. LUSTGARTEN said we not infrequently meet with cases in which there is an eruption of clavi without apparent cause. In certain individuals there is probably a predisposition in this direction. In Dr. Sherwell's case the lesions consist of a tylosis rather than distinct clavi.

DR. JACKSON said he regarded the lesions as corns. In some persons the tendency toward the production of corns is very marked, and they are often found on the soles of the feet, especially about the heel.

DR. FOX said the lesions in this case were papillomatous in character, and he would hesitate to apply to them the name of corns; they were probably due to the pressure produced by tight shoes.

DR. BULKLEY regarded the growths as warty in character. He recently saw a case in which similar growths appeared on the hands and feet, some of them exquisitely painful. He employed thuya, internally, but was not prepared to state its effect, although many lesions were improving. The more painful ones he removed with Marsden's paste.

DR. KLOTZ said he regarded the growths as warts.

DR. SHERWELL in closing the discussion, said that the appearance of multiple lesions of this character in certain persons is probably due to some idiosyncrasy. He did not think they were the result of pressure, as some of them have appeared since extra precautions were taken to avoid this.

A Case of Congenital Alopecia.—Presented by DR. J. A. FORDYCE.

The patient was a girl, aged four years, with complete alopecia. The father stated that when the child was born she had a few hairs, which soon afterward fell out. There are a few scattered eyelashes. There is no family history of alopecia.

A Case of Acute Generalized Lichen Planus.—Presented by DR. A. R. ROBINSON.

The case was interesting on account of the distribution of the lesions, covering the entire body and both upper and lower extremities, and the peculiar appearance of some of them. On the arm many of them were arranged in the form of circles. The majority of the lesions were small—large pinhead in size, with shining, non-umbilicated, flattened surface. Although thousands of lesions existed, no lesion could be seen bearing any resemblance to the lesions of pityriasis pilaris of Devergie.

DR. JACKSON stated that he has recently seen two very extensive cases of lichen planus involving more of the surface than the one here shown.

DR. FORDYCE referred to a case he saw a year ago where the lesions entirely disappeared under the use of arsenic.

DR. KLOTZ said he felt rather skeptical regarding the value of arsenic in these cases of generalized lichen planus, as the lesions had a great tendency to disappear spontaneously, the same as those of psoriasis.

DR. ROBINSON said his patient is now taking Fowler's solution, but thus far there has been no apparent improvement.

DR. BULKLEY referred to the well-marked circles on the arms as a rather unusual feature in these cases.

DR. LUSTGARTEN stated that he has found lichen planus is more frequently met with in private than in hospital or dispensary practice.

DR. SHERWELL stated that in these cases where the lesions are disseminated, the disease is much more amenable to treatment than where it occurs in the localized form. The first-class cases improve under almost any form of treatment.

DR. KLOTZ stated that he had seen a larger number of cases of lichen planus again within the past year than in the preceding years; the disease, he said, appeared to have a certain periodicity.

DR. BULKLEY thought the disease was common among people who bathe very frequently.

DR. FOX said it was common enough among those who bathe very seldom. Although he has lately seen an unusually large number of cases, he did not think that the actual number that occurs varies greatly from year to year. In one of the cases referred to by Dr. Jackson the lesions were very extensive; the patient was put on a strict diet, and after a week or ten days the improvement in his condition was marked.

DR. ALLEN, in reply to Dr. Bulkley, said that hydrotherapy is one of the favorite methods of treating these cases of lichen planus.

DR. ELLIOT said he had seen a number of these cases, and all of them rapidly improved under different forms of treatment; in one case arsenic

proved very successful; in another, simple alkaline treatment, etc. Each case must be taken on its own basis. He does not think it necessary to diet these patients.

DR. FOX said the value of arsenic in lichen planus, as in psoriasis, depends on when it is given. If it is given at the right time—when the disease has a tendency to disappear—it will have a very decided effect. Otherwise it may be given without any apparent effect whatever, or may do harm. It is best to first relieve the congestion of the skin by a strict diet—not a starvation diet—and then use local treatment.

DR. TAYLOR referred to a case of generalized lichen planus which he reported in 1870. The patient was a woman with very extensive lesions covering almost the entire body. She was put on alkaline treatment, but without apparent benefit. She was then given twenty grains of potassium chlorate, followed in about half an hour after meals by fifteen drops of dilute nitric acid; this was repeated three times daily. At the end of one week a marvelous improvement had occurred in her condition, and in five or six weeks she was entirely well.

DR. BULKLEY stated he still employs chlorate of potash and dilute nitric acid in these cases; of the former drug, however, he never gives more than fifteen grains three times daily.

DR. CUTLER said that a very extensive case of lichen planus came under his observation six weeks ago. The patient was put on various forms of treatment, including Fowler's solution, which was pushed as high as sixty drops during the twenty-four hours, but without producing any beneficial effect on the skin. At Dr. Taylor's suggestion he then put the patient on chlorate of potash and dilute nitric acid, and now, after ten days, there is very decided improvement.

DR. TAYLOR said it has been his experience with lichen planus that where the eruption is copious and hyperæmic arsenic increases the patient's sufferings, but that it can be used to advantage in cases where the eruption is localized and subacute in form.

A Case of Rhinoscleroma.—Presented by DR. KLOTZ.

The patient, a woman forty years of age, born in the western portion of Germany, married twenty years, had eight children; only the three youngest ones are living, but nothing in the history points to syphilis as the cause of their death. The patient herself has never been very strong, and passed through several acute diseases. For over ten years she has had trouble with her nose, which gradually became choked; her throat has not caused any pain or inconvenience except on several occasions when she had diphtheria and other acute affections. In the summer of 1888 she was about to have an operation performed on her nose when she was attacked by scarlet fever, which for the time being seems to have acted favorably on the condition of the nose. When she first came under Dr. Klotz's observation in April, 1889, the nose, which was naturally quite prominent and somewhat angular at the point, was uniformly enlarged; the skin was smooth and white, the enlargement apparently being due to some hard substance filling up the interior of the organ. The left nostril was unobstructed but for the presence of some gray crusts which adhered to the septum, and a moderate purulent discharge. The septum itself and the entire right nostril were covered by a round, hard mass, pale bluish-red in color, with a smooth surface excepting in the center,

where it was the seat of a firmly adherent crust which extended into the nose itself. This nostril was entirely impermeable to the passage of air; on the left side the obstruction was not quite so complete. On examination of the throat the uvula was found to be missing; the central portion of the soft palate was dark red in color, superficially ulcerated on the edges on both sides, and thinly covered with a sticky, yellowish secretion. These conditions suggested syphilis as a cause. Under mixed treatment and mercurial plaster the growth on the right side of the nose rapidly broke down and the swelling everywhere subsided, so that about the middle of May the deformity had almost entirely disappeared. The history of the last five years, during which the patient has been under constant observation, shows a continued fight against the recurrence of the new growth, now on the septum, now on the tip of the nose, now in the nostril, etc. Antisyphilitic treatment by the most different methods—internal medication of mercury and iodine, intramuscular injections of calomel (four in 1889), and calomel (two) and salicylate of mercury (six in 1891), inunctions and the fluid extract of sarsaparilla, Richter—have never failed to show a favorable influence; and although the Paquelin and the galvanocautery have frequently been called to aid, have kept the disease under control, as the present condition sufficiently shows.

Within the last four months all treatment was discontinued; since then the new growth has considerably increased, and now presents conditions quite similar to those in 1889. In the throat, however, the process has spread; almost the entire soft and to a large extent the hard palate have become invaded, together with the posterior regions of the oral cavity and parts of the gums. The central portions are cicatrized, the intermediate zones show a yellowish, moist, glistening surface, and the borders a deep red, lacquerlike appearance. Some places seem covered with a yellow, slimy secretion, which it is almost impossible to wipe off. There is altogether much more shrinkage of tissue and cicatrization than new formation, so that only with difficulty can the mouth be opened wide.

The specific character of the disease was always doubtful, but the prompt effect of antisyphilitic treatment seemed to justify its assumption for a time. Soon, however, the very affection of the throat, which at first had suggested syphilis, rendered it evident that the case was one of rhinoscleroma, although differing in some respects from the usual description. The condition of the throat and the effectiveness of mercurial treatment are the peculiar features of the case. Dr. Klotz stated that he hoped to get some material for microscopical examination. He had considered the question whether the injection of the toxines of erysipelas would not be justified, since the throat offered very little chance for local treatment.

All the members present agreed with the diagnosis of rhinoscleroma. Dr. Lustgarten expressed the view that the growth probably originated either in the nasal or pharyngeal cavity, deep down, which would account for the extensive infiltration in that region. As regards the success of the mercurial treatment in this case, the speaker said that in one case reported by Hebra the patient recovered entirely under mercurial inunctions, but the growth afterward recurred and pursued the typical course of rhinoscleroma. In the majority of cases reported, specific treatment failed completely. In conclusion, Dr. Lustgarten referred to an article on this subject by a Russian doctor, who proposed to treat these cases by means of the toxines of rhinoscleroma.

A Case for Diagnosis.—Presented by DR. BULKLEY.

The patient was a woman; aged thirty-three years; a native of the United States; married. She stated that three or four weeks before coming to the hospital she suffered from fever and chills, which were followed by a general eruption. The distribution of this eruption is very symmetrical, all four extremities being affected; also the neck and chest anteriorly, the intrascapular regions, and the buttocks. Some of the lesions are papular, others vesicular, and others pustular. They give rise to considerable itching, as the numerous scratch-marks show. The patient had been seen by several dermatologists, and various diagnoses had been made; some suggested dermatitis herpetiformis, others lichen planus, acne cachecticorum, a simple pustular infection, etc.

DR. SHERWELL regarded the case as one of dermatitis herpetiformis.

DR. CUTLER thought the eruption presented some of the features of acne cachecticorum.

DR. FORDYCE diagnosed the case as one of dermatitis herpetiformis.

DR. ELLIOT said he had seen the case before she had received any treatment, and he had then made a diagnosis of dermatitis herpetiformis. The lesions first appeared as papules and vesicles, which became pustular. They always came out in groups, and gave rise to intense itching. The eruption, on disappearing, left pigmented spots behind, and successive groups constantly made their appearance.

DR. LUSTGARTEN said the eruption reminded him of some peculiar very itchy lesions which he has occasionally seen in neurasthenic and cachectic individuals with a specific history. The cases are generally classed under the term of chronic urticaria.

DR. ALLEN thought that from the appearance of the eruption in this case, syphilis could be excluded; also lichen planus and acne cachecticorum. For want of something more definite, he would call it Duhring's disease.

DR. JACKSON said that from the history and the grouping of the lesions he would pronounce the case one of dermatitis herpetiformis.

DR. BULKLEY, in closing the discussion, said the woman gave no history of syphilis. Personally, he was inclined to regard the case as one of dermatitis herpetiformis.

Case for Diagnosis.—DR. KLOTZ presented a case to which he had referred at the last meeting, in connection with one narrated by Dr. Bronson. The patient was a young man who had come to the dispensary with a number of ulcers on the right side of the nose. Although he gave a history of syphilitic infection three years ago, the lesions did not present a truly syphilitic appearance, and looked very much more like lupus. Under applications of silver nitrate and salicylic-acid plaster they had almost entirely healed, leaving peculiar scars.

Drs. Elliot, Lustgarten, Allen, Jackson, Keyes, and Cutler made a diagnosis of syphilis.

DR. BULKLEY thought the case was one of syphilis, and advised testing the diagnosis by putting the patient on active mixed treatment.

DR. ROBINSON said he had only seen one case of fungating eruption produced by the bromides. He has never seen any eruption in children due to the use of sirup of ferric iodide.

DR. ALLEN advised mercurial plaster, continuously applied.

DR. CUTLER thought the lesions were cutaneous gummata. He advised mercurial ointment and constitutional treatment.

Colored Drawings Showing a Crustaceous Pustulo-fungating Eruption due to Bromide of Potassium.—DR. ELLIOT showed such drawings, and said that the patient was a young child who had primarily received fifteen drops of sirup of ferric iodide three times daily for a month; this produced an erythematous iodine eruption, followed by an iodine acne. The physician in charge then gave her bromide of potassium, beginning with two and one half grains three times daily and increasing it until she was taking twelve and one half grains every four hours; about eighty grains per day.

DR. LUSTGARTEN stated he had never before seen a case in which the eruption was so extensive. In patients where the system is very much weakened, or under special conditions, he has observed that even so innocuous a preparation as the sirup of the iodide of iron may produce an iodine eruption.

DR. ALLEN said he has never seen an eruption produced by the sirup of ferric iodide. In one case recently under his observation, a young girl subject to epilepsy, the bromides produced a very extensive fungating eruption from the knees down.

DR. BULKLEY said he had seen a slight eruption of acne produced by sirup of ferric iodide. In one case coming under his observation, a lady suffering from syphilis and epilepsy, a very extensive eruption was brought out by bromide of potassium given in connection with the iodide, by another physician.

DR. SHERWELL said he had seen somewhat similar eruptions produced by iodide of potassium.

DR. TAYLOR exhibited the photograph of a case with a very profuse bromide eruption.

DR. ROBINSON regarded the case as one of syphilitic acne of the nose. He stated that these cases are often very difficult to cure, and may require treatment for several months.

DR. KLOTZ stated that he had seen slight acne produced by the sirup of ferric iodide.

DR. ALLEN suggested that a combination of the iodide and bromide would produce a more severe eruption than either of the drugs given alone.

Report of Cases presented at Previous Meetings.—DR. SHERWELL reported that his case of prurigo mitis had improved very markedly under the use of cod-liver oil and sirup of ferric iodide, and local application of a mild salicylic ointment.

DR. CUTLER reported that his patient with purpura rheumatica had had a number of outbreaks of purpuric lesions since the date of the last meeting. Large patches have made their appearance on the upper and lower extremities. She has also had a number of attacks of rheumatism since.

DR. ALLEN stated that several months ago he exhibited a photograph showing a burn of the heel produced by the application of a hot-water bag while the patient was under the influence of an anæsthetic. The general opinion of the members at that time was that the resulting scar would be a tender one. This prognosis has been verified to some extent, as the scar is still tender on walking.

DR. FOX said he recently saw a case in which the diagnosis of anidrosis

might have been made. The patient was a man who claimed that he never perspired, no matter how hot it was. He also stated that he suffered very much during the warm weather.

DR. SHERWELL said he had seen one patient who never visibly perspired.

DR. LUSTGARTEN said that patients with chronic urticaria do not seem to perspire, but perspiration can be produced with pilocarpine.

DR. KLOTZ said he had seen local anidrosis of the hands or palms relieved by pilocarpine.

DR. ROBINSON stated that at the suggestion of some of the members at a previous meeting, he gave thuya to the patient who was suffering from multiple warts. The dose employed was ten drops of the tincture, three times daily. The drug had no effect on the warts, but produced an acute cedema of the entire body.

THE LOUISVILLE CLINICAL SOCIETY.

An Obscure Case of Cerebral Syphilis.—By DR. I. N. BLOOM.

A patient, about thirty-five years of age, was referred to me by an oculist in this city in July two years ago, suffering from iritis. No history of syphilis was apparent. The oculist in question simply sent the message that it was a case of iritis which he wanted me to see, and stated that there was absolutely no history, and the patient denied any specific disease.

I examined the man very carefully and found a number of scabs in the hair, some glandular enlargements about the neck, some mucous patches on the tonsils, or somewhere in the mouth at any rate, so as to make the diagnosis absolute. The patient gave no history of syphilitic infection, and had not exposed himself for about five months except with one woman, the woman whom he afterward married. This woman was sent to me for examination, and, strange to say, it so happened that I had treated her for another trouble on a former occasion. She was free from any syphilitic sign, and remains so to-day. The gentleman in question was absent on business trips on an average about three months in every four. In the fourth month he was in the habit of making short trips, so that probably he was in Louisville only about fifteen days out of four months. I put him under treatment as well as I could. No other symptoms developed, and he improved in health for two years. On every trip to this city he would pay me a visit, and was as well when I saw him in May last as at any time. He was a man who carried an immense amount of responsibility on his shoulders; he supported a large family, his mother being a widow. In the latter part of May he was still in excellent health, and started off on another trip.

In West Virginia, on the 23d of the following July, without any warning, he was taken with a very peculiar attack, and remained in his room at the hotel. When the servant made the usual round for cleaning the room, he stated that he was not feeling very well and preferred remaining abed. The next day the same condition of things existed, and the day following they went to his room and knocked and he opened the door. He answered questions in a dazed sort of way, and gave as his reason for not going out that he simply preferred to remain in bed. Matters were allowed to run along several

days more, when a physician was called in, and he was unable to rouse the man for some little time. He was finally somewhat aroused, and as he did not seem to be particularly ill, the doctor left. The man then went on to another town, and remained there in about the same condition for ten days longer; then went to another place, and so on until four weeks had elapsed. His wife in the meantime had been notified, and being very much alarmed started after him. He was brought to his wife's residence still in a partially dazed state, and again went to bed, remaining for some days. He was very uncommunicative, and only stated that he would be all right shortly. Getting no better, he was finally brought here, and I was sent for four weeks ago to-day.

I found him in a peculiar lethargic condition; his pupils responded very well to light; there was an opacity or pallor, a yellowness about the face similar to what we see in cancer—a typical cancerous cachexia extending to the eyebrows, forming a striking contrast to the extremely white forehead. This was very pronounced. He was acting mechanically in many respects, and it was with difficulty that he could be roused. He would sit up, and, if asked questions, would answer feebly and slowly. I made up my mind that the trouble must be some obscure syphilitic disease, and began at once giving him mercury (by inunction) and iodide of potassium in large doses; this has been continued up to the present time, with the result that the yellowness has all disappeared, his mind has cleared up, and about ten days ago—for the first time, as he says, since the 23d day of last July—he could read the paper and converse intelligently. He looks well and has gained in flesh; his general appearance is about as it was when I first saw him.

I look upon the case as probably one of obscure cerebral lesion, possibly sclerosis, without symptoms to show the site of this sclerosis of the brain. I want also to add that when I first saw him there was no evidence of any reflex trouble; as far as I know, the reflexes were perfectly normal. He was faithful in his treatment, so he tells me, and I have every reason to believe him; and the strange part of the case is the rapidity with which these symptoms came on without warning, and the subsidence of all symptoms under four weeks' antisymphilitic treatment. I am now giving him daily one drachm of mercury by inunction, and two hundred and seventy grains of iodide of potassium, three doses of ninety grains each.

DR. W. H. WATHEN: In syphilitic lesions of the brain and spinal cord, is it not a fact that the trouble is always multiple sclerosis? And, if it is multiple sclerosis of the brain or spinal cord, then is it not impossible to restore the diseased part to a healthy condition?

DR. I. N. BLOOM: The trouble is not always multiple sclerosis of the brain or the spinal cord; there are other causes.

DR. W. H. WATHEN: I ask the question because I can not understand how multiple sclerosis of any part of the brain can be restored to a healthy condition. I can understand how you may prevent further progress of the disease and bring about a healthy condition of the surrounding structures; you may prevent the extension of the disease and your patient go along through life in apparently a well condition. Multiple sclerosis is the result of rapid proliferation of the stellate and the spider-shaped cells, which completely destroys the normal nerve-cells. If the nerve-cells are destroyed, I do not see how they can be reproduced, because, in the regeneration of tissue,

like cells produce like cells, and we can not have embryonal cells that are to be converted into fixed-tissue nerve-cells from the stellate or spider-shaped cells. I mean fixed-tissue nerve-cells can not be produced from other cells. The stellate and spider-shaped cells are derived from the mesoblast, while the nerve-cells and the neuroglia are derived from the neuroblast, a part of the epiblast. You can not have a reproduction of the ganglionic nerve-cells when they have been once destroyed.

DR. J. W. IRWIN : Dr. Bloom's report was interesting, and I followed it as closely as I could. His statements were clear and concise. I do not think that Dr. Bloom laid very much stress upon the question of multiple sclerosis of the brain. I was rather led to believe that he was in doubt as to the true pathological condition present in the case; therefore I hardly see that it was necessary to consider the question of multiple sclerosis in connection with the case as Dr. Wathen has done, nor do I just now see that this feature is pertinent. In the first place, not enough time elapsed for these organic changes to have taken place; and, in the second place, there was not sufficient loss of intelligence at any time; there was only temporary obscurity of the powers of the mind, as indicated by the report. Had there been sclerosis causing obscurity of intelligence, it would have been impossible to have had this condition coming and going, because when intelligence is once obscured it remains so until the patient has received sufficient treatment to clear up the troubled tissues.

Now diseases of the brain when due to syphilis are not always alike; there are a great many parts of the brain that may become affected in different ways. There may only be a minute point affected; again, it may be very diffuse. We may not have sclerosis at all. I have great doubts as to whether or not the brain ever fully recovers from syphilitic sclerosis. We hear of such things occurring, but whether the diagnosis has been correctly made is another question. I can see when such pathological changes take place in the brain, or the life of the tissues is destroyed for want of nutrition, that the normal state can not be reproduced, and the intelligence of such an individual must remain affected to a certain degree. When syphilitic gummata occur in the gray matter of the brain, with the absorption of these deposits the patient may regain a relative state of intelligence, but most frequently it will be found that a weak spot remains.

In the case under discussion, from its duration as reported, which appears to be accurate, and from the phenomena present, it would seem to indicate a low form of inflammation, possibly involving the base of the cerebellum rather than the cerebrum. I think this view is borne out by the limited loss of intelligence in the case, for had the gray matter of the cerebrum been affected intelligence would have been more disturbed; had the white matter of the brain been involved, there would have been some local paresis, some uncertainty of gait, etc.

But when we come to speak of the diagnosis of conditions of a brain like this one, it becomes a very hard matter to tell just what the trouble is, and the only sure way is to wait for an autopsy. The most interesting feature in the case to my mind is that the diagnosis of syphilis appears to have been correctly made, as has been proved by the treatment; beyond this we can not go now. I certainly would suggest that the same plan of treatment be continued until the patient is fully well.

DR. I. N. BLOOM: I will endeavor to answer some of the questions that have been asked, and will take them up in their inverse order. In regard to its being sclerosis of the brain, I believe I distinctly stated that the symptoms were too obscure to attempt its location, but in a general way I thought it was sclerosis, and said so. Dr. Irwin has to some extent criticised that view, and started out by stating that the symptoms were very obscure, then proceeded in his own way to locate it more absolutely than I had done: he also states distinctly that the trouble is a low form of basilar meningitis, and that its origin is syphilitic.

My friend Dr. Wathen has favored us with an elaborate criticism, and I thank him for it because I have learned a great deal about the origin of tissue in embryology. He starts out, however, on a wrong basis—that is, as to the definition of what sclerosis is, and the degree of the sclerosis. Sclerosis, as I remember it, is simply a hardening induration. Again, Dr. Wathen instances as a necessary accompaniment of sclerosis, extensive destruction, which I take occasion to deny as occurring in the brain or elsewhere. On the contrary, syphilitic sclerosis I take to be a condition of infiltration of new cells which are capable of absorption before destruction or atrophy comes on. And I am reminded of this by the numerous cases that we have seen of exostosis resulting from syphilis, especially of the tibia; cases in which there have been great masses, and where these have under treatment completely disappeared, so that the most careful examination failed to show the least irregularity, where we have had enlargements the size of a small egg. So it is in the brain. I take it: a syphilitic deposit, if it has not gone far enough to involve the destruction of brain-cells, may exist, and under treatment disappear without any destruction whatever.

So that, in the case under discussion, while the symptoms are not well marked, and while we might not be able to make an absolute diagnosis of syphilitic sclerosis, there was some obscure syphilitic affection of the brain, and which in such a case we could hardly call anything except sclerosis.

DR. W. H. WATHEN: Sclerosis of the central nervous tissue of the brain is a proliferation of the stellate or spider-shaped cells, with a destruction of the nerve-cells proper. I stand upon that as the correct definition of the pathology of multiple sclerosis.

Items.

Notice to Exchanges.—The publishers of the journals with which we exchange are requested to address all such periodicals to the editor at 66 Park Avenue, New York city. All business communications should be sent to D. Appleton & Co., 72 Fifth Avenue.

A Case of Soft Chancre of the Eyelid. (*Norsk Magazin for Lægevidenskaben*, No. 6, 1894.)

Dr. Ole B. Bull, of Christiania, referring to a case of hard chancre of the eyelid, reported by Dr. Holth (*Norsk Magazin for Lægevidenskaben*, p. 383,

1894), where he thought transmission to have taken place from kissing, records a case of soft chancre of the right upper eyelid in a patient with a soft chancre of the penis, from which it was transferred to the eyelid by rubbing his eye with his finger on account of a foreign body. As this localization is much rarer in Scandinavia than in France, it proves that kissing is more in vogue in the south than in the north.

F. H. PRITCHARD.

Localized and Persistent Erythema from Antipyrine. (*Ann. de dermatologie*, No. 3, 1894.)

Dr. L. Brocq, of Paris, has observed four cases of localized and persistent erythema from the use of antipyrine. They occur in either round or oval plaques, occasionally of quite large size, even eight centimetres in diameter. They appear isolated and scattered here and there on the surface of the body, without symmetry and generally few in number. In the beginning the color is reddish gray, and they are often accompanied by burning sensations. There is rarely actual pruritus; later they become indolent. The erythema disappears, little by little, leaving a brown pigmented spot, which after repeated eruptions, which always select the same spot, may become blackish brown. Sometimes small vesicles are formed, and nearly always there is lamellar desquamation on disappearance of the erythema. The plaques are quite distinctly outlined, and are sometimes associated with a distinct swelling of the skin. The pigmentation is the last to disappear; in the smaller plaques it is no longer observed after two or three weeks, if the drug be left off; in the larger ones it persists longer. If the drug be still continued, a new erythematous outbreak appears on the old sites with increase of pigmentation. In some cases the eruption may last from a month to six months.

F. H. PRITCHARD.

PERIODICAL LITERATURE OF DERMATOLOGY, SYPHILIS, AND
GENITO-URINARY DISEASES.

COMPILED BY

GEORGE THOMAS JACKSON, M. D.

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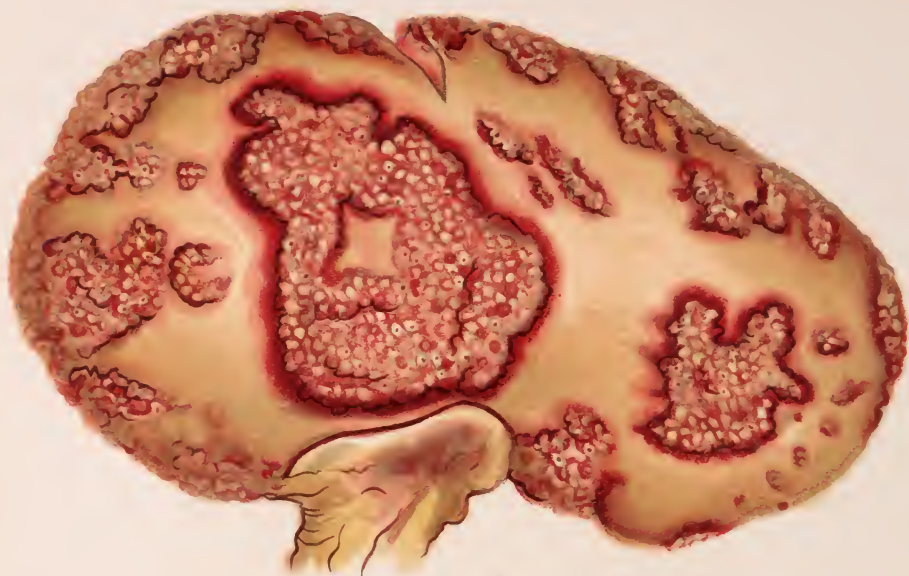


Fig. 1.—Septic Kidney of Undetermined Age.



Fig. 2.—Early Stage Septic Kidney.

ILLUSTRATING DR. BROWN'S ARTICLE ON SEPTIC
AND TUBERCULOUS KIDNEYS.



Fig. 3.—Tuberculous Kidney.

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Original Communications.

A CASE OF CYSTITIS, PYELONEPHRITIS, AND PYONEPHROSIS
DUE TO COLON-BACILLUS INFECTION.

PRESENTATION OF TWO KIDNEYS SHOWING DIFFERENT
STAGES OF INFECTIVE DISEASE. THE BACILLUS
COLI COMMUNIS ONLY BEING FOUND. PRESEN-
TATION OF ONE KIDNEY IN THE EARLY
STAGE OF CORTICAL TUBERCULOSIS.*

By F. TILDEN BROWN, M. D.

MR. PRESIDENT AND GENTLEMEN: The title of this first case is purposely made assertive, with a distinctly stated ætiology, more with the intent to elicit discussion upon the importance or non-importance of the *Bacillus coli communis* as a pathogenic agent in urinary diseases, than because this particular example affords any unusual opportunities for positive deductions.

By the courtesy of Dr. McCosh I studied and now report this case, which came to his service in the Presbyterian Hospital, where he performed a successful nephrectomy. It is due to the operator to state here that he is not ready to accept the views of Albarran, Krögius, Røvsing, Hallé, and others regarding the pathogenic properties in general of the colon bacillus, and responsibility for the title of the paper is assumed by myself, mainly for the purposes already stated.

The patient, S. W. A., male, forty years old, United States, widower, masseur. No rheumatic, tubercular, gonorrhœal, or syphilitic history. Fifteen years ago he had malarial fever; ten years ago, bronchopneumonia, due, he was told, to his occupation as file-grinder. He then became a railroad hand, and had good health until three years

* Read before the American Association of Genito-Urinary Surgeons, 1894.

later—1886—when he sustained a rather severe contusion of his left side by some freight falling upon him. It is probable that the left kidney was a little injured at this time, as some slight functional disturbance of urination followed it; but as the sexual functions were noted at the same time to be affected, the lumbar cord only may have suffered a lesion, or a kidney and cord injury may have occurred together. At the time of the accident the patient had been a widower for one year; during this time he had had promiscuous intercourses four or five times in a satisfactory manner. One week after the accident, during coitus, he experienced at the moment of ejaculation severe pain, which was characterized by suddenness, and by a sensation suggesting the passage through the urethra of some large, hard body. Coitus attempted four days later, although unaccompanied by pain, was attended by emission before intromission. Since then this latter condition has been permanent.

He sought professional aid immediately upon discovering this sexual weakness. Treatment by sounds for four months was uneventful, until finally a sound larger than any passed before caused some pain; ten minutes later he was compelled to urinate, and he noticed blood in the urine. Pain and frequency continuing, he a few days later entered a hospital and was there successfully treated for cystitis.

When discharged cured he called upon his former attendant, and reluctantly submitted to the introduction of a sound. The following day he returned to the hospital with an attack of cystitis more severe and protracted than the first. Within a few days he noted pain in the region of the left ureter and then higher up on the left side. He was confined to bed for three weeks.

Upon leaving the hospital in 1888 symptoms of cystitis had been replaced by those of pyelitis or pyelonephritis. In this condition he continued for three years, when, being obliged to do heavy lifting as a nurse, the discomfort in the left side increased and the quantity of pus in his urine became greater. It was at this time he first noticed an enlargement of his left kidney.

He had been accustomed to irrigate the bladder with boric-acid solution, but in September, 1893, he experimented with a weak solution of hydrogen peroxide as a vesical lavage. Almost at once the catheter was forcibly expelled, the injection accompanying it with sputtering of gas. He very soon had a chill, followed by fever, nausea, and vomiting. This was the introduction to a rather prolonged and quite painful attack of pyonephrosis, during which the kidney attained a considerable size before the yielding of the obstruction, which liberated much pus-laden urine and afforded temporary relief. In the next four

months he had three similar attacks. From the last he was just recovering when he entered the Presbyterian Hospital on January 23, 1894.

On admission, temperature, 98·2°; pulse, 84; respiration, 20.

Physical Examination.—Heart, lungs, liver, spleen, negative; extremities, negative; prostate, seminal visicles, and epididymes, negative.

Abdomen.—On left side, on deep palpation, some pain and resistance, and well up under the free ribs an indurated mass can be felt. Urine, turbid, acid; specific gravity, 1·020; contains much pus and very little blood; albumin in proportion to the blood and pus present. On January 27th the urine was drawn by a sterilized catheter. Cultures from this on different media gave a pure growth of *Bacillus coli communis*. For one month the patient was kept under observation. During the last week of this time pain in the left side had become constant, abdominal tension had increased, and a tumor in the left kidney region was now felt.

February 20, 1894.—Operation, extraperitoneal. The left ilio-costal space is well exposed by body flexure and bags under the right side. A four-and-a-half-inch incision, commencing along the outer border of the erector spinæ muscle and curving forward, divides the serratus magnus, lumbar fascia, and quadratus lumborum, exposing the perirenal fat. On separating this, a dark tissue of thin texture and made up of rounded folds appears. At first it resembled discolored colon; fuller exposure showed it to be kidney, represented by a thin-walled sacculated mass of treble the normal size.

To permit a nephrectomy the wound was enlarged anteriorly. The lower half of the organ, which had been separated from firm adhesions, the ureter, ligated and cut, now filled the wound. Evacuation of its pyuric contents made it possible to reach for the upper half of the kidney and the pedicle. At this moment, upon slight traction, the wound quickly filled with blood, and an alarming hæmorrhage of arterial blood was apparent. With long clamps through the well of blood the operator made repeated and finally successful efforts to secure the vessels; the remaining adhesions were quickly severed and the kidney removed. The four clamps were left in place, packed around by gauze, and the dressing applied. The pulse, which had been strong before, was now not perceptible at the wrist. For the ensuing twelve hours the patient's condition was critical, and for the three following days all the prominent symptoms of severe hæmorrhage were present. Forty-eight hours after the operation the dressing was removed, the clamps quietly unlocked, and, as no bleeding occurred, they were removed. A sponge rather firmly fixed at the bottom of the wound it was thought best to leave.

Plantings made from the kidney immediately upon removal yielded a pure growth of the *Bacillus coli communis*.

Again, on April 2d, five weeks after operation, the urine, drawn by a sterilized catheter, gave the same growth. Again, on May 23d, three months after operation, the same test gave the same growth.

At this time the patient was apparently perfectly well. He was twenty pounds heavier than he had been at any time during the past three years. The daily excretion of urine varied between forty-five and fifty ounces. It was quite clear on gross inspection, acid, and passed at normal intervals.

In this case it is not irrational to think that the patient had a not very active bronchial or pulmonary tuberculosis when he was told that he must change his occupation because of a broncho-pneumonia; that, from this source, a local renal tuberculosis followed his back injury; and that by urethral trauma and cystitis the kidney lesion subsequently became a suitable nidus for an ascending infection by the colon bacillus, resulting in pyonephrosis. But all evidence of tuberculosis, so far as the examination was carried while the patient was in the hospital, failed to disclose it.

Two other cases have recently come under my observation where, when the kidney was removed, the only lesions seen by gross and microscopic examination were those of a septic nature, and the only contagium found by cultures speared from the organs after disinfection of the surface by cauterization was the *Bacillus coli communis*—so adjudged to be by its morphological and non-motile appearance, by its somewhat characteristic growth on different media, by its production of gas, and by its coagulation of milk.

For these and all the bacteriological examinations connected with the cases presented in this paper I am indebted to Dr. G. A. Tuttle, assistant pathologist to the Presbyterian Hospital.

For the specimen and history of the following case I have again to thank Dr. McCosh. The kidney specimen in the succeeding case is from a patient referred to me by Drs. Walker and Swift, and upon whom Dr. McBurney performed the nephrectomy.

FIRST OF THE TWO SPECIMENS SHOWING INFECTIVE DISEASE OF UNCERTAIN DURATION * (Fig. 1, colored plate).

Mrs. F., twenty-five years; Ireland; in United States six years. Married three months. No tubercular, rheumatic, syphilitic, or gon-

* The specimen shown at the time this paper was read.

orrhœal history. No history of strain or traumatism. For three years she has had pain in the left side of varying severity, with no distinct recollection of how it began. At times these attacks of pain have been quite severe and attended with nausea and vomiting, and urination was then rather frequent, averaging every two hours. Blood in the urine was never noticed. During the last two years the patient has lost twenty pounds. She is now two months pregnant.

On May 11, 1894, the patient went to bed apparently well. She awoke during the night with very severe pain in the region of the left kidney. Obstinate vomiting began and persisted for forty-eight hours, when she was admitted to the medical service of the Presbyterian Hospital with a temperature of 102.5° , pulse 105, respiration 20. A painful and apparently enlarged left kidney was felt. The following day she was transferred to the surgical division, where extraperitoneal nephrectomy was performed by Dr. McCosh on May 14th, yielding this moderately hypertrophied kidney (Fig. 1, colored plate). The capsule, which is now removed, was only a moderate cloak to the lesions. These are seen to be confluent and discrete, the former being irregularly circular, the largest patches being the size of a dollar. The smallest discrete lesions are of pinhead size. All are distinctly raised; the patches are quite uniform but undulating plateaux. A narrow inflammatory zone surrounds all lesions, which everywhere exist in different stages of development, as papules, pustules, or raised ulcers. Few depressed cicatrices are to be seen.

Although the surface and superficial parts of the cortex evidence the gross lesions, cultures from the deeper portions of the kidney gave the same growth, namely, *Bacillus coli communis*.

Immediately after the operation the patient's temperature became nearly normal, and was not afterward above 99° F. Pains, nausea, and vomiting ceased, and urination assumed normal intervals. A week later abortion was produced as a precautionary measure to the other kidney. One month after the operation a bacteriological examination of the acid urine drawn by a sterilized catheter gave by culture a pure growth of colon bacillus.

Eight weeks after the operation the patient left the hospital well. Six months later* the patient had gained in weight, and had no urinary symptoms. A bacteriological examination of the urine drawn by a sterilized catheter gave still a pure culture of the colon bacillus.

It is difficult to formulate a satisfactory analysis of this case. There was no discoverable lesion of the kidney or pelvis to account

* Examination and note made since reading this paper.

for the attacks of pain and vomiting which had at times occurred during three years. That the organ may have been a movable one we can think of, but there was no evidence to that effect at the operation. In fact, it was then particularly firm in its position. That the septic processes found could have existed for so long a time it is possible but hard to believe. From the superficial position of the gross lesions on the surface of the cortex we would infer that the contagion had reached the organ by the blood-channels rather than by urethral ascent from the bladder. And in this connection I think future study will show that the hæmatogenous route for renal infection by the *Bacillus coli communis* is more common than at present it is believed to be.

SECOND OF THE TWO SPECIMENS* SHOWING A VERY EARLY STAGE OF SEPTIC KIDNEY (FIG. 2, colored plate).

D. G., United States, thirty-five years, single. Father was of gouty habit, and died of some renal complication. No tubercular, rheumatic, syphilitic, or gonorrhœal history. No history of strain or traumatism. Was very active, but always considered delicate.

In May, 1893, patient had *grippe*. Was referred to me in August, 1893, with marked symptoms of cystitis, which yielded to treatment in three days and left unmistakable evidence of pyelitis, no cause for which could be arrived at by persistent study. In January, 1893, the pus-laden acid urine drawn by sterilized catheter afforded no growths on various media, and guinea-pig inoculation was negative. Calculous and tuberculous pyelitis were sought to be proved to exist, but in vain. Left-sided pyelitis was diagnosed by the cystoscope, the pus issuing from the left ureter giving the distinct effect of cloudy swirls. In February, 1893, perineal cystotomy and tube drainage were instituted for the relief of frequent urination and tenesmus; the bladder was greatly relieved, but, with the exception of polyuria, which now disappeared, the conditions pertaining to the kidney—pyuria—remained the same.

Late in April, 1893, perineal drainage still being maintained, symptoms of sepsis appeared; temperature about or above 102·5°; constant nausea, occasional vomiting, frequent sweats. Although neither kidney gave any symptoms on palpation, the previous observations showed certainly some disease of the left pelvis, and in the present crisis an operation directed toward that organ seemed to be called for. Nine days after the appearance of septicæmia, nephrectomy was performed by Dr. McBurney. After separation of the fatty envelope firm re-

* Specimen shown at time this paper was read.

sisting lesions could be felt through the capsule. The kidney (Fig. 2, colored plate, now shown with the capsule unremoved), presents appearances which promise to eventuate as those seen in the first specimen, where the inflammatory zone about all the lesions is broader and much more vivid on the surface; the incision, however, exposes an acute process within the cortex. Cultures made from the surface and deeper portions gave pure growths of the *Bacillus coli communis*.

Nothing was found, by gross or microscopic examination, in the pelvis or calyces to explain the long pre-existing sterile pyelitis. The acid urine immediately after the operation became free from pus and albumin. The perineal tube was removed, and the urinary intervals soon became normal.

One month later bacteriological study of the acid urine drawn by sterilized catheter showed a pure growth of the colon bacillus. Eight months after the operation, and when the patient was in better health than he had had for years, and ten pounds heavier, a similar bacteriological test of the acid urine gave the same result—pure growth of the *Bacillus coli communis*.

Besides the outline here given, the details in this case are of sufficient interest to make them the subject of a paper now preparing by the operator and myself.

The only two points now requiring notice are: first, that before the onset of sepsis bacteriological study of the acid pus-laden urine proved it to be sterile. But after sepsis had been diagnosed by clinical symptoms, bacteriological examination of the removed kidney and all subsequent examinations of the non-purulent acid urine showed a pure culture of the colon bacillus.

Secondly, the demonstration by this case of the value of the cystoscope, and that of experimental bacteriology, with production of artificial cystitis and pyonephrosis by the *Bacillus coli communis*, where a pre-existing lesion or a contemporaneously inflicted trauma had been shown to be one of the essential factors. It was by the cystoscopic recognition of a pre-existing left-side pyelitis which gave us reason to believe that only the left kidney was in a receptive state for an ascending infection, and that its removal was indicated if any operative interference was to be offered. The fact that in this specimen, as well as in No. 1, the gross septic lesions were mainly on the surface, would suggest an arterial deposition of the contagium rather than a ureteral ascension. But if this was the case, the organ may have been less competent than a sound one to resist an attack directed against it by circulating micro-organisms as well as by way of direct ascending continuity.

To review briefly these three cases, we see in all, first, clinical evidence pointing to a diseased state of one kidney, which, upon removal, shows septic lesions, with no other ascertainable cause than the presence of *Bacillus coli communis*.

Secondly, we note in all not only a recovery from the renal and urinary symptoms, but a condition of better general health and weight than the patient had had for a long time previous to the operation. Thirdly, we note long after recovery the persistence of the bacilli in the urine.

If from these facts we can not absolutely conclude, we may at least infer that the *Bacillus coli communis* under certain circumstances becomes a pathogenic agent when it gains access to the kidney either by the blood or by the ureter. At the same time we may infer that this bacillus can continue to live in the urinary tract without exciting symptoms or interfering in any manner with a condition of apparent health, unless a subsequent trauma be sustained by the mucous membrane of this tract.

Because, during operations, as well as at autopsy, the lesions pertaining to renal sepsis are not infrequently mistaken for those of tuberculosis, the following typical specimen is shown in conjunction with the two preceding.

PRESENTATION OF A KIDNEY IN THE EARLY STAGES OF CORTICAL TUBERCULOSIS * (FIG. 3, colored plate).

For this specimen and history I am indebted to Dr. Kelly and Dr. O'Neill, of the Colored Hospital, New York.

J. H., aged thirty-two, male, colored, laborer; admitted to Colored Hospital, New York, September 6, 1894. Parents living; nine brothers and sisters all living and in good health. Never had variola, typhoid or intermittent fever, gonorrhœa, or syphilis. One slight attack of acute rheumatism.

Five months ago he began to suffer with a cough and dyspnœa; he steadily lost weight and strength. On admission, temperature, 100.2°; respiration, 25; pulse, 88. Urine, specific gravity, 1.010, acid, light-colored; no albumin or sugar. Heart, liver, spleen, and extremities negative. Retraction above and below both clavicles. Dullness on percussion at both apices. Pleuritic friction sounds. Very little cough. Dull and stupid, tongue slightly coated, but appetite good and bowels regular. Diagnosis, phthisis pulmonalis. Died September 9, 1894. Autopsy: (Head not opened.) General miliary tuberculosis existed in

* Specimen *not* shown at the time this paper was read.

both lungs, liver, spleen, both kidneys (see colored plate), in the prostate, and four or five tubercles were seen near the base of the bladder; testes and epididymes and vesicles not examined. None of the organs show broken-down cavity lesions.

Microscopic sections of the kidney tubercles show giant and epithelioid cells and tubercle bacilli.

Fig. 3 (colored plate) shows characteristic small tubercular nodules now somewhat past their initial stage of miliary granulations. In this case the tubercle bacilli have been distributed to the cortex of the organ by the renal artery. The circulation in the arterioles of the glomeruli and those of the cortical surface is the most retarded, and from these vascular points the bacilli may best gain the surrounding connective and cellular tissue. In this specimen the apical portions of the pyramids, the calyces, and the renal pelvis showed no lesions, which they must necessarily have done had the disease been of the ascending urinary variety.

The differentiation between infective processes of *Bacillus coli communis* (Figs. 1 and 2, colored plate) and those of *Bacillus tuberculosis* (Fig. 3, colored plate) is strikingly shown by the inflammatory conditions pertaining to the former and by their absence in the latter. Marked hyperæmia not only surrounds the foci, but many of the individual lesions have suffered peripheral ulcerations; whereas the tubercular lesions are characterized by absence of this surrounding hyperæmia, and whatever of ulceration or necrosis occurs in the individual lesions is a central, not peripheral, manifestation.

The distinction in the cases here shown is apparently easy; but when tuberculosis is implanted upon pre-existing inflammatory renal changes, and again when this order is reversed—that is, where in either case a mixed infection presents—it may be difficult, if not impossible, by gross inspection to say that tuberculosis does or does not exist.

In the early stages kidneys attacked by an ascending infection of *Bacillus coli communis* microscopically show degeneration of the renal epithelium and small pus collections between the tubules. With a higher power the colon bacilli are seen in the tubules, in the pus collections, as well as in isolated clusters where they have undergone considerable proliferation before any tissue changes have been instituted. At times a favorable section will permit the tracing of this invasion from the apex of a pyramid to a lesion on the cortical surface.

Schmidt and Aschoff call attention to the celerity of this ascent of the uriniferous tubules, where the different pathological stages develop in from thirty-six hours to one week, but we must remember that their

observations concerned artificial pyonephrosis where ligation of the ureter was done in conjunction with the injection of the bacilli.

The more or less general small-cell infiltration of the tissues in the surrounding regions of small tubercular processes and those due to the colon-bacillus infection are not unlike.

40 East Thirty-first Street.

COMPLICATIONS OF VACCINATION.

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AT the present time—in which the value of vaccination as the only real preventive of variola is greatly questioned by a large proportion of the public and, I am sorry to say, by not a few professional men—it may be of interest to study the objections raised by the opponents. I will, therefore, taking for granted the effectiveness of vaccination in the prevention or amelioration of smallpox—a fact firmly established by statistics, and accepted by the majority of unbiased physicians and laymen, and regarded as a valuable treasure in all civilized countries of the world—confine myself to the consideration of one of the principal arguments brought forth and defended by the antagonists of this measure, the diseases of the skin caused by vaccination.

There can hardly be any doubt in the minds of those who have had great experience in vaccination that there exists an intimate connection between vaccination and cutaneous eruptions as a sequel thereof. Happily, when this beneficent operation is properly conducted there is no great danger of serious accidents and complications. The only rash which may be properly considered a true vaccine rash is the erythema vacciniae, which is not an infrequent sequel of vaccination. Setting aside this true vaccine rash, it has been sufficiently proved that under certain conditions the disturbance of the system produced by the introduction of the vaccine virus may result in susceptible subjects in the manifestation of a considerable variety of the ordinary affections of the skin to which young children are subject.

We know as an undisputed fact that certain cutaneous eruptions will make their appearance after infectious fevers—foremost, scarlet fever, then morbilli and variola; and it stands to reason that the process of vaccination has a similar ætiological action. The skin diseases attributed to vaccination are exceedingly numerous and rather difficult

of classification. Foremost of all is probably a lichenous eczema, or a special variety known as lichen urticatus. Urticaria, erythema multiforme, even psoriasis, pemphigus, and prurigo, have been found to occur after vaccination. Such eruptions are found to be due to the absorption of the pure vaccine virus; other skin lesions—as impetigo, syphilis, lupus, erysipelas, cellulitis, furunculosis, gangrene, and pyæmia—are due to mixed inoculation, either introduced at the time of vaccination or at a subsequent period through the wound. This classification—(1) eruptions due to pure vaccine inoculation, and (2) eruptions due to mixed inoculation—has been adopted by Dr. Malcolm Morris, of London, in an excellent paper read at the British Medical Association, July, 1890. It seems to me to fully cover the ground and to include on a scientific ætiological basis the great number of subsequent cutaneous lesions due to vaccination. On the basis of this general classification I have, after careful study of the various lesions secondary to vaccination, found the following classification a convenient and practicable one for the comprehension of the complications of vaccination:

Complications of Vaccination.

I. Due to vaccine virus.....	Local.....	<ul style="list-style-type: none"> Erythema localis. Dermatitis. Vaccina herpetica. Adenitis.
	Systemic....	<ul style="list-style-type: none"> Erythema vaccinicum. Urticaria. Erythema multiforme. Purpura. Vaccina herpetica.
II. Due to mixed inoculation....	Local.....	<ul style="list-style-type: none"> Impetigo contagiosa. Furunculosis. Cellulitis. Erysipelas.
	Systemic.....	<ul style="list-style-type: none"> Tuberculosis. Pyæmia. Leprosy. Syphilis. Eczema.
III. Sequelæ of vaccination.....		<ul style="list-style-type: none"> Urticaria. Pemphigus. Psoriasis. Furunculosis.

Erythema localis.—This form of erythema belongs to the class of erythema venenatum, being limited to the region with which the vaccine virus, acting as irritant, has been placed in contact. It spreads over a limited area, and passes imperceptibly into healthy skin. If severer in grade, it passes into the condition termed dermatitis.

The *dermatitis* often noticed in the course of vaccination is similar to those inflammations which are the result of the contact of various poisonous and irritating substances with the integument. In this case

the vaccine virus acts as the irritating agent, causing a mixed or severe type of inflammation according to the susceptibility of the individual. It must be diagnosed from erysipelas by its moderate local symptoms of heat, redness, and swelling; it does not spread with an elevated abrupt edge, being more diffuse in character and not marked by severe constitutional disturbances as we find it to be the rule in erysipelas.

It sometimes occurs that a number of papules and vesicles form on the seat of vaccination and the surrounding parts, which itch intensely and pass off in two or three days. Dr. Hugh Thomson, of Glasgow, has described several cases of such groups of vesicles appearing in the neighborhood of the vaccination pustules as supernumerary vesicles, surrounded by a slight areola, which gradually dry up and fall off without leaving a scar. A small amount of lymph was contained in these vesicles. This form of lesion may also be general, pointing out the fact that the vaccine virus had been absorbed by the circulation.

Adenitis is quite a common complication of an otherwise normal course of vaccination, and needs but a passing mention.

It is a fact often noticed that more or less generalized eruptions occasionally accompany vaccination, and a host of secondary lesions of the skin may be mentioned in this connection. Those who believe that vaccinia is an exanthematic fever and that these eruptions are the direct outcome of the virus in the system have termed them "vaccinides," referring to them as *vaccine généralisée*.

The most common of this class is the erythema vaccinicum.

Erythema vaccinicum (*Roseola vaccinica*).—This erythema usually begins at the seat of vaccination, but may appear as isolated patches and large hyperæmic surfaces over the trunk and the extremities. It usually occurs on the first or second day after the vaccination, or on the eighth or ninth day after the vaccine vesicle has become mature. Why there should be two such periods may be explained as follows: In the course of vaccination the erythema appearing on the first or second day is simply due to traumatism from the operation of vaccination, as may otherwise also occur after irritation of a mechanical or chemical nature, or after minor operations and slight accidental injuries (described as scarlatina traumatica by English writers); whereas the rash which appears on the eighth or ninth day in all probability depends on the resorption of particles of the purulent contents of the vaccine vesicle.

This erythema is usually accompanied by elevation of the temperature of the skin, slight febrile disturbance, and always terminates favorably.

It is a complication of vaccination, which is not dependent on any specific element of the vaccinal virus, but must be ranked as to its pathology with certain forms of medicinal exanthems. With regard to this certain class of erythemas, it is essential that a predisposing element exists in the individual, or, as we term it, an idiosyncrasy predominates. In such persons any mechanical or chemical trauma, as that of vaccination, may be liable to produce a similar erythematous lesion of the skin. We are therefore hardly justified in explaining such phenomena as due to local infection or a lymphangitis of the skin—as Hebra has tried to explain it—but must consider it the effect of the vaccine virus on the vasomotor nerves, and identical in *modus operandi* as the well-known eruption of urticaria after the ingestion of certain solid or liquid articles of food. It may therefore, I think, be termed a neurotic disease of the skin, due to vasomotor disturbance; a primary contraction, followed by dilatation and paralysis of the vessels affected.

With regard to diagnosis of the erythema vaccinicum, there is a possibility of mistaking it for measles and the macular syphilide. Anatomically, it is impossible to distinguish the roseola vaccinicum from that of morbilli and syphilis. But, if we remember that the eruption of measles is usually abundant in the face and scanty on the extremities; that the spots are discrete and often arranged in segments and attended by a slight desquamation; and especially the constitutional disturbance—the diagnosis is easily made. The roseola syphilitica is oftenest met on the anterior surface of the body, also on the palms and soles. It consists of oval, rounded, or irregular blotches, which in the early stage may be slightly elevated and unattended by either heat or itching. Here also the general history and duration of the eruption will tend to render the diagnosis easy.

Urticaria is not at all uncommon, and erythema multiforme has been noticed at times during the period of vaccination. The rare purpura is said to be of ill omen. Vaccinal herpes has been referred to under the local action of vaccine virus.

CLASS II. *Eruptions caused by Mixed Inoculation.*—Although we are not always able to identify the specific germs which with the vaccine virus produce the mixed inoculation, we are justified, by knowledge of epidermics, to call the lesions so produced a mixed infection. If such foreign germ is introduced with the lymph, or at a later period by contamination with the wound, it will not fail to produce its peculiar manifestations. It may produce only local lesions or general infection. Among the first class we most frequently meet with impetigo contagiosa, furunculosis, cellulitis, and erysipelas.

Impetigo contagiosa is always due to the inoculation of contagious pus, independently of its source. Its relation to vaccination, following it frequently, is another instance of pus inoculation; the vaccine lesion is often very itchy in its purulent stage; the child scratches it and transfers the pus to other parts of the body. The contagion flourishes more easily in the cachectic.

Furunculosis.—The mycotic nature of furunculosis has been demonstrated beyond question. The presence of the *Staphylococcus pyogenes aureus* and *albus*, the transmission of the disease by contagion, and the successful inoculation of pure cultures, are reported by Boekhart, Escherich, Hergot, Chambard, and Voituriez, and its introduction into the system through the vaccine pustule is not at all improbable.

Erysipelas in the course of vaccination is the most important and dangerous complication, and must be dreaded as the principal weapon in the hands of opponents of vaccination. This was especially true when the question of ætiology of erysipelas had not been solved. But ever since the discovery by Fehleisen of the streptococcus, a micro-organism identical with the pus streptococcus, as the single and invariable causative agent of the disease, its ætiology is no more doubtful. This germ has no power to penetrate healthy skin, but may effect an entrance through any abrasion, especially such as rendered by vaccination. The coccus may exist either in the lymph, or may be introduced into the system through the vaccinal wound by the vaccinator by means of the instrument, hands, or clothing. The development of erysipelas may take place immediately following vaccination, or later beginning on the fifth day, but usually on or after the eighth day, with the well-known characters of erysipelas. The erysipelatous inflammation begins at the seat of the pustule of vaccination as an irregular, sharp-edged, elevated red patch, accompanied by slight pain and itching. On pressure, the color of the skin is of a slight yellowish tinge. In the course of the following days the inflammation spreads uniformly over the adjacent skin tissue, so that within two or three days the erysipelatous patch is as large as one or two palms of the hand. In moderate cases this ends the progress of inflammation. The high fever, sleeplessness, slight delirium, dryness of the tongue, etc., rapidly disappear, the livid red color of the skin changes to a bluish brown-red or light brown, the infiltration diminishes, the brownish colored epidermis separates itself in fine scales or lamellæ, and the skin presents a normal appearance.

In polemical writings of anti-vaccinists such diseases as scrofula, tubercle, diarrhœa, and other common causes of infantile mortality

are alleged to have increased owing to vaccination. There is little or no reason, in theory or experience, to suspect that tuberculosis or scrofulous infection is ever communicated by vaccine lymph. As far as the local development of tuberculosis is concerned, of which we may consider lupus a form, Dr. Colcott Fox relates only two or three cases on record, and Dr. Morrow a peculiar suspicious lesion, which he terms "raspberry sore," regarding it as tubercular in origin. These being extraordinary cases, no conclusion of value can be drawn. It seems to be an established fact that the germ of tuberculosis does not exist in the medium of lymph, as was shown by the experiments of Meyer and Acker, who vaccinated one hundred and five undoubtedly phthisical patients under antiseptic precautions, and in no single instance could tubercle bacilli be found in the lymph.

It has been believed for a long time that leprosy may have been communicated by the act of vaccination, but, however suspicious some of these recorded cases may be, very little definite about it is known. Probably the clearest evidence on this point are two cases reported by Dr. Daubler in the *Monatsheft für pract. Dermatologie*, 1890, which seem to confirm in a very strong manner the possibility of the conveyance of leprosy in the process of vaccination when lymph is taken from a leper. Remembering Arning's important observations of leprosy bacilli in vaccine lymph taken from a leper, it is not to be denied that such inoculation may be occasionally possible, but it may be said that we have at present no clear and indisputable facts proving that leprosy has been spread by means of vaccination.

Next to erysipelas, the communication of syphilis through vaccination seems to be a forcible argument of opponents of vaccination. That syphilis has been caused by vaccination is a fact so indisputably established that it may be considered as beyond controversy, but that all vaccinations in which the vaccifer is syphilitic are followed by this disease appears to be by no means the case. The experience of almost all writers on this subject has been that the eighth-day vaccine virus taken from an undoubtedly syphilitic child will not convey syphilis. It has been ascertained, however, that vaccination sometimes hastens the development of latent syphilis, as it may produce cutaneous manifestations in those prone to them. Setting aside this fact, we know that under adverse circumstances syphilis can be conveyed from one person to another by vaccination. The theories that have been set forth to explain the method of action have been manifold. It seems to be a settled question with all observers that the medium of blood from a syphilitic person is the most important factor in communicating syphilis, whether the same has been derived from

the floor of the vesicle, wounded by unskillful opening of the vesicle, or after it has been effused into the vesicle partly made up of concreted blood. Some striking examples of this latter method have been recorded, where a number of children had been vaccinated from the pure lymph of a single vesicle, and only toward the end of the vaccination, when the pure lymph had been exhausted, the children so vaccinated with the residue, probably containing elements of blood and pus, became inoculated with the syphilitic virus.

Again, the poison may be conveyed from the vaccinee to the vacciner, or from one vaccinee to the other, and it seems to be clearly established that in most of the well-authenticated cases on record the conveyance of syphilis was effected in this manner. Another possible way of infection is by admixture of the secretion of a syphilitic lesion.

Koebner, however, does not share the view that the admixture of blood is necessary to produce syphilis by vaccination, and seems to ably maintain this view by a number of experiments. He prefers to consider that the conveyance of syphilis takes place by reason of an admixture, not of blood, but of the specific secretion from a syphilitic lesion existing beneath the vaccine vesicle, which is more liable to occur after the eighth day.

If syphilis has thus been communicated, the chancre appears at the seat of vaccination after the usual appearance of incubation, to be followed by the customary secondary symptoms. If the person, however, was already latently syphilitic, these symptoms follow each other in rapid succession, often as soon as the first week, with the characteristic macular, papular, or bullous eruption, condylomata, and lesions of the mucous membranes.

The course of the vaccine pustule, however, runs perfectly normal.

Vaccinal syphilis shows itself after the third week, rarely before the twentieth day. If there happen to be several vaccine pustules, but one is usually affected. The ulcer itself is not very deep, but is marked by infiltration and induration. The glands show the characteristic, typical, syphilitic adenopathy, and the diagnosis is confirmed by the appearance of constitutional manifestations after the usual period of incubation.

Syphilis, however, can never follow vaccination with animal lymph. Numerous experiments by Ricord, Koebner, Neumann, and others have proved that syphilis is never conveyed into the genus *bovinum*. If syphilis does follow the use of bovine virus, it is through criminal carelessness on the part of the vaccinator, the poison being introduced from without by means of an unclean lancet, a tainted vaccine point, or any other infectious element.

There can be no doubt that the local inflammatory action and febrile disturbance set up by vaccination is frequently the occasion of an attack of eczema, in those so disposed, which may commence at the site of the vaccine vesicle or at some distance from it. It would, however, be erroneous to conclude from this fact that the eczema is produced by vaccination, as we can often see an eczema after infectious fevers, as measles, scarlet fever, and other specific fevers. However, it can not be denied that the act of vaccination determines the outbreak of an eczema, in those persons who possess a disposition to such a disease, which would probably have occurred at any rate, though not perhaps at that particular time. It may also aggravate already existing eczema to such an extent that it is advisable to delay vaccination for an indefinite time. It is likewise a fact worth mentioning that in some chronic and inveterate cases it has precisely the opposite effect—namely, curative. The following case, related by Dr. Lawson Tait (*Brit. Med. Journal*, January, 1882), illustrates this peculiar effect of vaccination: "The case refers to a child of a commercial gentleman of great intelligence, who allowed me to try vaccination after everything else had been done that could be suggested. It was a most obstinate case of eczema over the whole body, the scalp being the seat of its worst display. The glands of the neck were chronically enlarged and at one time suppurated so seriously as to endanger the child's life. Temporary benefit was derived from changes of air, but drugs had no effect. Acting on the usual rule, I put off the vaccination of the child for three several periods of nine months. I told the father that I believed vaccination might cure the child by exercising some influence on its nutrition. He agreed to the experiment; and to diminish risk as far as possible, I used the lymph which had passed through one healthy child from the heifer. The result was most remarkable, for in a few days a marked improvement was visible in the child; and in a little more than three weeks all traces of the eruption had disappeared, save a roughness of the skin which still exists. The hair rapidly grew on the scalp, and the child now is in all respects as fine an infant as I have ever seen."

A similar case is reported by the same author of a two-year-old child with chronic eczematous eruption all over the body, which was vaccinated and thereby completely cured within a month. Of course, it is only in exceptional cases that such happy results can be expected.

The cutaneous eruptions of vaccination most commonly met with are *papular*, *papulo-vesicular*, *pustular*, and very rarely *bullous*. It appears from the third to the eighteenth day, mostly on the eighth, begins on the arms in half of the cases, and on the trunk, neck, or face in

the rest. The rash lasts from a few days to a week or two, but in some of the vesico-pustulous cases fresh crops appear perhaps for months. Behrend records typical cases of erythema exudativum multiforme in the first week of vaccination, and in Napier's case the erythema was in rings. Urticaria has also been frequently noticed. Cases of psoriasis following vaccination have been recorded by Hyde and Rohé.

I am indebted to several of the members of our society for recording for me some of the cutaneous lesions as witnessed by them during the period of vaccination.

Dr. Burgess reports two cases of vaccination rashes; one occurring in a child of five months, the other in a girl of ten years of age. The eruption was a general one. Unfortunately, the doctor did not see the cases in that condition, and is therefore unable to describe the rashes.

Dr. Lemon has seen a vaccination rash occurring in a four-year-old boy, and describes it as follows: "The eruption appeared on the thirteenth day. The arm was slightly swollen, with a smooth pink hue to the skin of the outer external surface between the elbow and shoulder. There were also discrete papules on the extensor surface of the arms and legs and two circles of the same on the face, one on each cheek. The scab was of large size, but clean, and the skin about it was intact."

I judge from this description of Dr. Lemon's case that the rash belongs to the group of eruptions caused by the systemic absorption of the vaccine virus. Dr. Kaumheimer has favored me with the report of the following case: "The child, aged about six years, had been vaccinated at school. On the eighth day, when I saw him, he was covered with numerous blotches somewhat larger than a split pea, irregular in shape, and resembling in color the petechiæ of purpura. He was somewhat febrile, but complained of no pain in the spots, which were from one to two inches apart all over the body except the face. His mother informed me later that the blotches had disappeared a few days later." Dr. Kaumheimer has also seen a number of cases of intense erythema or even dermatitis confined to the seat of vaccination. Undoubtedly the doctor's description of the first case is one of true vaccine erythema or roseola vaccenicum, and is perhaps remarkable for the large extent of surface involved.

Dr. Wingate informs me that he can recall perhaps half a dozen cases of roseola vaccenicum, and has seen one or two cases of a general eruption of a vesicular or pustular character.

Dr. McDill writes that he has seen but one marked case of general erythema following vaccination with intense itching, which appeared with the pustulation and subsided only with the drying up of the pus.

The following cases of interest in connection with the subject of vac-

cination eruptions have been reported to me by Dr. Tower. The doctor estimates the number of vaccination cases seen by him during the past few years to be about five thousand, and cites the following cases as having an important bearing on this topic: The first case is that of a twelve-year-old German girl, healthy and of a very light complexion, who was seen by Dr. Tower on the ninth or tenth day after vaccination, with a temperature of 103° , a very accelerated pulse, and an eruption of about forty vesicles distributed over the back, chest, and thighs of the size of a small pea. There were two or three similar vesicles of the same size on the vaccinated arm. Besides this particular case, Dr. Tower has seen a number of cases of vaccinia herpetica. The other case mentioned illustrates in a striking manner the way in which mixed inoculation may take place. It is a case of erysipelatous infection occurring in three children of one family after the eighth day of vaccination in the following manner: The mother of the vaccinated children had had several attacks of erysipelatous inflammation of the nose and adjoining parts. At the time of vaccination she was again suffering from a similar attack, and applied carbolated vaseline to the parts affected by erysipelas. On the eighth day the arms of the children vaccinated became very much inflamed, and the mother applied the same ointment she had been using to the inflamed vaccine pustules, producing in each child a typical infection of erysipelas.

Dr. Friend has furnished me with the particulars of the following peculiar condition after vaccination: A female child nine years of age was vaccinated February 27th, and was again seen by the doctor on March 9th, when she had all the symptoms of vaccination. About one inch and a half above the vaccine pustule there was almost a complete circular eruption, consisting of slightly raised papules, which gradually moved toward the pustule, surrounding it almost entirely, disappearing on the fourth day after apparently gradually fading away.

I had intended to speak of the treatment of these various forms of vaccination lesion, but found that my paper had already become too elaborate. What I desired to prove was that those rashes could not offer any reasonable objection to vaccination, as the majority and most harmful ones can easily be avoided by care and antiseptics. I am strongly in favor of vaccination.

Correction.—On page 117 of the March, 1895, number of this JOURNAL Dr. F. Tilden Brown is incorrectly reported as saying, "scrapings from the cervix had revealed the gonococci." It should read, "scrapings from the cervix had *not* revealed the gonococci."

A CASE OF IDIOPATHIC ATROPHY OF THE SKIN.

BY GEORGE T. ELLIOT, M.D.,
New York City.

THESE are only a limited number of cases of idiopathic atrophy of the skin recorded in medical literature, as may be seen in Dr. Bronson's * recent article and report of a superb example of the process. He has carefully collected those known, so that I need only cite his paper as a source for information on the subject, and I would, therefore, only add one more case to the list, which may possibly be of interest since, being for some months under observation, certain features in the mode of its extension could be observed and followed.

Male, German, aged forty-five, in the liquor business, consulted me February 25, 1889, for an ulcer on the left ankle, arising from a slight traumatism. The veins of the leg and feet were extremely varicose, and examination of the knee and thigh revealed the curious condition to be described in this article, and to which the patient had not made any reference. He stated that he was in robust health, though from time to time he had attacks of rheumatism. His functional condition was perfectly good. He was tall and slight in build. No history pointing to syphilis or to any chronic intoxication was obtainable. When a child, he had had an eczematous eruption in both popliteal spaces and ulcerations on the legs. Both had been treated and healed, the latter leaving scars still visible. About the age of twenty-five, he had been struck on the left knee by a ball, and he had been lame for some time after. Some thirteen years ago he had been in the habit of jumping a great deal, both from heights and when on the ground. As nearly as he could remember, the cutaneous changes had begun about the left knee some fourteen or fifteen years ago, and they had slowly progressed up the thigh. When I saw him, the affected area began anteriorly about three inches below the left Poupart's ligament, and posteriorly from the middle of the gluteal region. From these points, the changes extended over the entire skin of the thigh and nates down to and including the knee. The affected surface was completely atrophied, excessively thin, dry, wrinkled, and loose, not bound down, of a dark red, without any traces of the hairs, and scaly. The veins were very large, prominent and tortuous. No subjective symptoms were mentioned, nor was there hyperæsthesia, or anæsthesia of the surface.

* E. B. Bronson. *Journ. Cutan. and Gen.-Urin. Dis.*, January, 1895.

The atrophic area was sharply limited and defined below by normal skin, but the upper boundary was slightly diffuse and continuous with a narrow, purplish-red zone. This zone was not elevated nor did it appear œdematous or swollen. It was more marked on the right knee, where the process was beginning and occupied only a space about two inches by four. This area was of recent date, and the patient stated that he had first noticed a purplish blush over the knee, followed in a short time by a varicose dilatation of the veins and a gradual thinning of the skin. Whether this description was exact or not I will not attempt to say, but the man was under observation until June, 1889, and it was seen that the purplish zone extended slowly up the thigh, and progressively as it advanced the veins became dilated and varicose, the skin atrophic, and the hairs disappeared, so that a condition entirely similar to that on the left thigh resulted. The ulcer on the ankle having been healed, the patient has no longer been seen. Unfortunately, specimens for microscopic study were refused.

With the exception of its more limited extent and the absence of subjective symptoms of all kinds, this case may be said to correspond very accurately in its clinical phenomena to Bronson's. It appears, however, to me that the most important feature shown was the purplish-red zone bounding the advancing area of atrophy, and which, progressively as it spread, was followed by the atrophic metamorphosis, a symptom not mentioned as occurring in Bronson's case. The process began at the left knee, and extended upward and peripherally so as to occupy the entire thigh; but while at its point of inception the limitation toward the normal skin was sharp and incisively definite, above, the atrophic area gradually merged into the purplish-red zone, and this latter into the normal skin. The same appearances were also noted over the right knee, and here slow extension was seen and followed, so that it would appear that this purplish-red area was the primary step in the process, and the atrophy was only its consequence. What pathological condition was represented by this clinical symptom it is certainly difficult to say, and rather useless to speculate upon, in view of the fact that the course alone of the process could be observed, while the changes in the skin itself were not. I would, therefore, only state that in my opinion the advancing cyanotic zone was the primary step and the most important part of the process, the atrophy being secondary. What was the ætiological factor or factors in the production of this progressive venous stasis and subsequent atrophy of the skin can also not be stated. The blow on the left knee from the ball might be regarded as an ætiological factor, but that would not explain the development of the process on the right knee a number of

years later. The habit of jumping, acquired by the patient, can likewise be excluded, as the primary changes had already existed about the left knee for a year or more before. In this case, therefore, as in the others recorded, the same conclusion is reached—that the cause of the atrophy is unknown and obscure, and no satisfactory explanation for its occurrence and existence can be given.

14 West Thirty-ninth Street.

REMARKS ON THE TREATMENT OF CYSTITIS.

By GARDNER W. ALLEN, M. D.,

Boston.

THE following observations are based on the records of a number of cases which have come to my notice within the last eight years. I have little to say of rare or severe forms of vesical disease and shall consider chiefly the treatment of the ordinary run of urinary symptoms met with in out-patient and office practice; but the commonplace in medicine is not always the least important.

Most of the cases were of gonorrhœal origin and in nearly all the inflammation was confined to the neck of the bladder. Extension backward of gonorrhœa into the neck of the bladder, accompanied by a sharp onset of urinary symptoms, is of course common enough. In non-gonorrhœal cases the cause of the cystitis is not always clear, but in a certain number is apparently traceable to a posterior urethral catarrh resulting from congestion of the prostatic portion, with or without inflammation of the seminal vesicles, and brought about by prolonged and repeated sexual excitement. It begins insidiously, has little or no tendency to recover, and is apt to be difficult to manage.

As regards the treatment of cystitis, of the various internal remedies I prefer the saline diuretics, especially benzoate of sodium. Few surgeons nowadays, however, would long defer local treatment of the disease. For the simple purpose of washing out the bladder, perhaps a saturated solution of boric acid gives on the whole the best results. For the purpose of producing a decided impression upon the mucous membrane of the vesical neck I have had very gratifying experience with nitrate of silver and permanganate of potassium. I have tried various other substances, but not to a sufficient extent to furnish data of any value.

Nitrate of silver is of course familiar to all, and I suppose is more used than anything else in the deep urethra, and deservedly so, for it

is probably the most valuable remedy we have. It is, therefore, so well known and has been so much written about that little need be said of it here. I will merely remark that I use a milder solution than formerly, rarely going above one per cent, but usually inject rather more, that is to say, ten or fifteen minims instead of four or five. I think also that these injections are much more effectual if immediately preceded by the passage of a large sound, except in the more acute cases.

Potassium permanganate, so far as I know, has not been very extensively used in the bladder; at least, I do not remember having seen the reports of its use. I have employed it a good deal in the last six years with great satisfaction in cystitis and chronic prostatitis, and reported some cases four years ago. Where it fails, nitrate of silver often succeeds, and *vice versa*.

The bladder should be thoroughly irrigated with the permanganate solution, and this is conveniently done by means of a large Ultzmann syringe (which has a capacity of about five ounces) connected with an elastic or soft rubber catheter. One syringeful at a time is injected and allowed to flow out again, and so on until the solution comes away with as bright a color as it went in; then two or three ounces are injected and left in the bladder, which the patient should hold as long as he comfortably can. It does not seem to me necessary to have the eye of the catheter just in the deep urethra during the injection, as advised by Ultzmann and others; if it projects a little beyond, it seems to serve the purpose as well. The fluid apparently settles down into the neck of the bladder as the patient walks about, and exerts a stimulating and astringent action on the mucous membrane; this is checked, however, before it has time to become irritating, by the decomposition of the solution, which takes place as soon as a small quantity of fresh urine is secreted. It is well to begin with a solution of about 1 to 4,000 or 5,000; weaker than this is useless on account of its rapid decomposition. It may be increased at the next sitting, generally after an interval of four to six days, to a strength of 1 to 3,000. For the third and subsequent injections a 1-to-2,000 solution may be used, if well borne. The treatment is a mild and safe one, but is more troublesome to carry out than the instillations of silver nitrate. If good is to result, it is soon apparent, and if there is no improvement after a few injections it might as well be abandoned.

In order to show the practical results of treatment I will briefly report a few illustrative cases:

Case I.—W. M., twenty-eight years old, on August 11, 1888, was afflicted with his second attack of gonorrhœa, which had already lasted

nine months; for three months micturition had been painful and abnormally frequent. The bladder was washed out with a solution of permanganate of potassium (1 to 4,000), three ounces being left in. This was repeated ten days later, and on the 30th he reported that he could hold his water four or five hours without trouble. He was now irrigated with a 1-to-3,000 solution, and on September 6th micturition was normal. He remained well until the following May, when he contracted a fresh gonorrhœa, and on June 6th complained of being obliged to urinate every half hour day and night, the act being very painful, and followed by severe tenesmus. He was given an instillation of silver nitrate, one per cent, which was followed by partial retention, and two days later the bladder was irrigated with a permanganate solution (1 to 2,000). June 11th he reported great relief, but continued partial retention. He was catheterized, fourteen ounces of turbid urine evacuated, and the bladder again washed out with a 1-to-2,000 solution, and on the 13th with a 1-to-1,500 solution. After this there was entire relief from urinary symptoms, although the urethral discharge continued. No further local treatment was required. The patient was seen a month later, and at that time was perfectly well.

Case II.—J. C., age twenty-one, on May 24, 1890, had a gonorrhœa of six weeks' duration, and for five days had been urinating with pain and difficulty every hour day and night. He was irrigated with permanganate solution four times with entire relief. On June 3d micturition was normal, and continued so.

Case III.—A woman, twenty-eight years old, on May 6, 1892, had urinary symptoms of two weeks' duration accompanying gonorrhœa. Micturition was increased in frequency by day, although there was little trouble at night. There was severe burning during the act, and painful contraction at the end, followed by severe tenesmus. There was considerable urethral discharge. The urethra was irrigated with a solution of corrosive sublimate, after which the catheter was passed into the bladder, and urine containing a large amount of pus drawn off. The bladder was then washed out with a permanganate solution (1 to 3,000), and three ounces left in; it was followed by considerable tenesmus. The irrigation was repeated three days later, as a result of which the cystitis was wholly relieved and did not return.

Case IV.—D. M., age twenty-eight, on July 23, 1892, had had gonorrhœa several times, the present attack having lasted five months, with vesical symptoms of five weeks' duration. Micturition was scalding and very difficult, sometimes stopping suddenly, and increased in frequency; there was pain at the end of the penis. The urine was

high-colored, with offensive odor and a thick muco-purulent sediment. Examination for stone was negative. A catheter was passed, and five ounces of very foul residual urine drawn. The bladder was then washed out with a permanganate solution (1 to 3,000). Relief was prompt and improvement progressive. The irrigation was repeated six times within the next two weeks, and then the patient continued it daily at home for two or three weeks longer. On September 20th the urine was normal, and all symptoms had vanished.

The following case was of interest to me as presenting more than average difficulty in treatment:

Case V.—J. C., age thirty-four, was first seen March 25, 1892. He was suffering with his second attack of gonorrhœa, which had lasted three months. Cystitis had set in during the first week of the disease. He had had internal treatment only, and had been confined to his room for the last month. Local treatment was begun with deep injections of silver nitrate. No relief being experienced, permanganate irrigations were tried, but were not well borne, and daily irrigations with boric acid were substituted. The patient was allowed to go about at first, but got worse and was then kept in his room nearly a month, the boric-acid irrigations being continued, and later increased to two a day. Improvement was marked for a while, but finally came to a standstill. I became convinced that the prostatic urethra needed stretching, and that he would not get well without it; so, on May 16th, dilatation was cautiously begun. Sounds, followed by deep injections of silver nitrate, were passed three times a week, gradually increasing in size from No. 25, the meatus being freely divided. When No. 32 was first passed it seemed tight and caused a good deal of pain. Suddenly something was felt to give way, and the patient experienced a sharp pain; the withdrawal of the sound was followed by considerable bleeding. No. 33 was immediately passed and slipped in with ease. From this time improvement was more rapid. The dilatation was continued until No. 36 passed easily. June 29th, when treatment was suspended, there was still at times a slight sense of irritation at the neck of the bladder and a few shreds in the urine; these symptoms subsequently entirely disappeared. The expulsive force of the bladder, which was impaired throughout the disease, has not been wholly recovered.

I will conclude this paper with the report of a case of vesical catarrh:

Case VI.—A. S., fifty-seven years old, has been under my treatment for chronic cystitis and stricture at intervals for about four years. Micturition has been abnormally frequent and more or less difficult

for many years, requiring occasionally the use of a catheter. In March, 1893, he broke a catheter in his urethra; the end slipped into the bladder and formed the nucleus for a stone. In July I found him in great distress and removed the stone, which gave marked relief; but the cystitis remained in an aggravated form. During the next three months the strictures were cut and the bladder was pumped out twice and washed out frequently with various solutions; but, with the exception of a few periods of temporary improvement, he grew worse until it seemed as if some radical operation must be done to relieve his great suffering. As a last resort an emulsion of iodoform was injected into the bladder. The effect was almost immediate, and very striking, entire relief from the more distressing symptoms being afforded. The injections were given three times a week, later twice a week, and continued several weeks. They enabled him to live in comparative comfort, although abnormal frequency of micturition and an ammoniacal condition of the urine persisted.

A CASE OF CANCER OF THE URETHRA.*

BY EUGENE FULLER, M. D.,
New York.

THE specimen, which is one of villous cancer originating in the urethral mucous membrane, was taken from an old man whose death was hastened if not directly caused by retention of urine due to the plugging of the canal by the growth.

Fig. 1 represents a side view of the distal portion of the organ. Fig. 2 represents the internal appearance of the growth, an incision having been made from the meatus along the frænum and floor of the urethra, which allowed the sides of the organ to be spread apart, thus exposing the urethra. In the glans penis there are four sinuses connecting with the urethra. Three of these can be seen in Fig. 1; the fourth is on the right side of the glans, and consequently does not appear in the photograph. All these sinuses are largely filled with the growth. The one, however, just above the meatus and the meatus itself are so corked by the villous mass as to be water-tight. In studying this specimen, the early history of which is unfortunately somewhat meager it is evident that the growth first of all filled up the fossa

* Presented before the February, 1894, Meeting of the Section on Genito-Urinary Surgery, New York Academy of Medicine.

navicularis, thus shutting off the urine from its natural vent, the meatus. At the same time the soft cancer destroyed the firm urethral tissues, thus allowing the pent-up urine to infiltrate and finally to discharge itself from a sinus which in turn was itself choked up by the encroaching growth, only to be replaced by another, a little farther

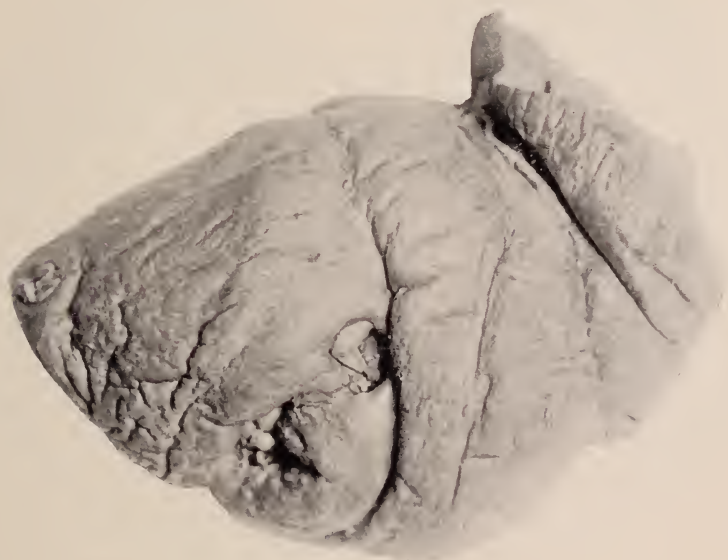


FIG. 1.

removed from the center of infection, and so on, until at length the individual in question died, as has been described.

Dr. Fordyce, who has also kindly photographed this interesting specimen, will append the result of his microscopical investigation.

Microscopic Examination.—This extremely interesting specimen of cancer of the penis had been so badly preserved in alcohol that it was impossible to obtain very satisfactory sections for microscopic purposes. The new growth was soft and friable, and took the stains imperfectly or not at all. Cancers of the urethra are so rarely met with that they are well worthy of a careful study, and it is to be regretted that a more detailed examination could not be made in the case. The new growth was, however, an epithelioma, as shown by the presence of numerous epithelial cell nests inclosed within proliferating processes of epithelial tissue which filled up the fistulous tracts communicating with the urethra and composed the papillary outgrowths from the urethral mucous membrane.

It could not be determined from the material at hand whether the cancer was primary in the urethra or whether it had extended from a growth within the bladder. In the cases of epitheliomata of the

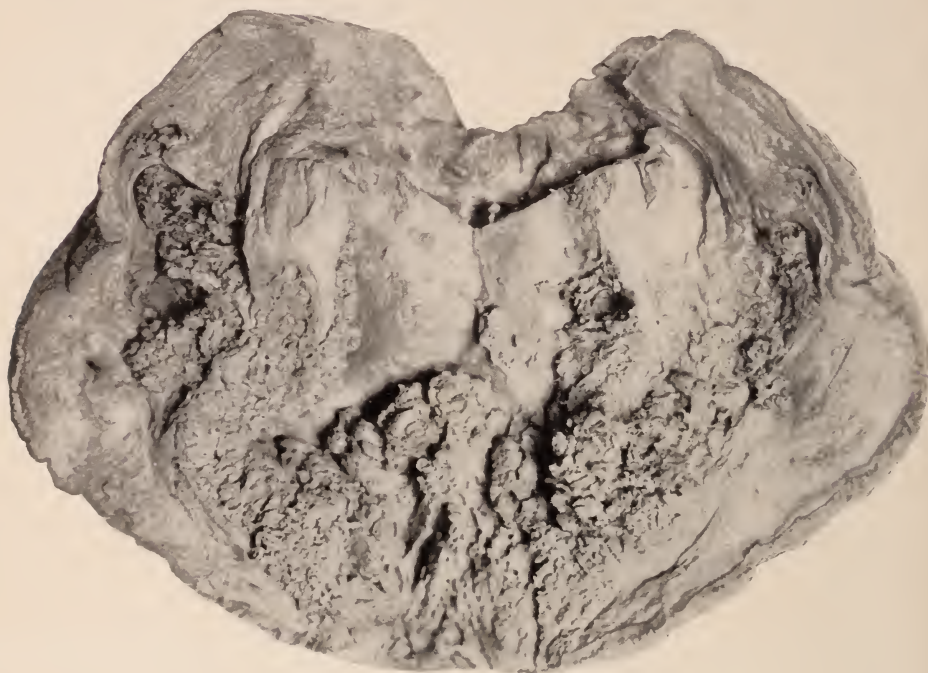


FIG. 2.

urethra quoted by Sutton (*Tumors, Innocent and Malignant*, 1893), from Griffiths, Beck, and Witsershausen, the new growths started in the perineal urethra and led finally to urinary obstruction and fistulæ.

The tumors were grayish white in color and extremely brittle.

TREATMENT OF EPITHELIOMA OF THE FACE WITH LACTIC ACID.*

By I. N. BLOOM, M D.,

Dermatologist to Louisville City Hospital, etc., Louisville, Ky.

IN November, 1894, I was called by Dr. J. W. Drake, of Parkland, to see a patient, aged sixty-five years, who looks to be eighty-five, the subject of chronic bronchitis, breathing very short, with a very

* Report of a case presented to the Louisville Clinical Society.

weak and irregular heart, and a possible murmur. For five or six years he has had a small sore situated on the cheek. This sore went through the usual characteristics of a slow-growing epithelioma. Its growth was slow until about three months before I was called to see the case, when it began to develop very rapidly. I observed the case carefully for the purpose of reporting it. At the time I saw the patient the following conditions presented: There was an unusually thickened and indurated ulcer about the center of the cheek. The cavity was about the size of a silver dollar; fully two thirds of this surface was occupied by an elevated, indurated, thickened, characteristic wall. The question asked by Dr. Drake was, What could be done to bring about a cure? A number of plans suggested themselves. Of course, under ordinary circumstances, direct excision with the knife would first demand attention; second, curetting under cocaine; third, the use of strong caustics—all of which I thought would be dangerous. I was really afraid to use chloroform, and afraid to use cocaine even in small quantity. About that time there occurred to me a paper I had read by the gentleman who introduced iodoform to the public, Von Mosetig Moorhof. Many of you will doubtless remember this paper. He is a very conservative surgeon, and one of the few who never says anything until he is certain of it. His publication, to which I refer, was on the use of lactic acid in cancers, a method which has never been very generally adopted. His paper was followed by a series of others, in which he made the remarkable statement that lactic acid had the power of attacking and destroying cancerous growths and not injuring the healthy tissues. I had used this treatment once, eight years ago, in an epithelioma occurring on the face of a very old lady, without any marked benefit; but it was not properly applied, because, after the second application, I went away and left the case in charge of an assistant who was probably not as thorough as was necessary to insure good results. At any rate, I suggested to Dr. Drake that we put this plan into effect: Dr. Drake was to faithfully carry out the treatment and see the patient once or twice per day, and I was to see him once per week. The treatment consisted of pure lactic acid and silicic acid made into a paste and applied. It was probably about fifty to sixty per cent strength. The first application was made, and I saw the patient again at the end of the week. He said that he suffered very little pain, much less than what he had been led to expect. We then increased the strength, making the paste more fluid, and applied it, which caused some pain, but at no time was the pain very severe. This paste was applied faithfully once per day. The surface of the sore commenced to granulate, the walls broke down like magic, and it almost seems like exag-

generation when I say that the result was a perfectly clean cicatrix. The patient was discharged January 2, 1895, from all further observation, and there is a perfectly clean cicatrix about the size of a penny; it is smooth and somewhat reddish, of course, but the smoothness and non-elevation are characteristics to which I would call your particular attention.

I speak of the case because that method of application, so far as I know, has not been in practice here. Six or seven weeks from the first application the man has got entirely well. The result is absolutely perfect. I hope this will stimulate others to put the method into use, and I believe they will have similar results.

MAY AMPELOPSIS QUINQUEFOLIA GIVE RISE TO A DERMATITIS?

By JOSEPH GRINDON, M. D.,

Clinical Professor of Diseases of the Skin, St. Louis Medical College.

I DESIRE to place on record an *apparent* case of dermatitis venenata due to poisoning by *Ampelopsis quinquefolia*. I am perfectly well aware that a single observation such as that to be related establishes nothing, and that most if not all of the cases of dermatitis attributed by patients to the *ampelopsis* are really due to *Rhus toxicodendron*, which to the untrained eye closely resembles it. Besides, the various members of this association whom I questioned on this point on a former occasion all agreed in saying that dermatitis from the Virginia creeper, or American ivy as it is sometimes called, had never come within the scope of their experience, and all were of the opinion that such alleged cases were due in reality to *R. toxicodendron*. Although all but convinced that this view is correct, I nevertheless think it worth the while to record a supposed case which possesses a certain scientific value, inasmuch as the suspected plant was identified by a trained botanist.

The observation was communicated to me by Mr. H. J. Webber, at that time assistant professor of botany at the Shaw School of Botany, a department of Washington University, St. Louis.

I subjoin his letter:

"At the request of Dr. Grindon, I take pleasure in recording the following observation of an apparent case of poisoning by the genuine Virginia creeper, *Parthenocissus quinquefolia* (L.), Planch. (*Ampelopsis quinquefolia*, Michx.).

"A plant of the creeper grew abundantly at one side of my father's residence in central Iowa, climbing over some gooseberry bushes near the house door. My sister, a young lady about twenty years of age, came home after an extended absence at school, and shortly afterward broke out abundantly on the hands and face with 'water blisters,' similar to those caused by *Rhus toxicodendron*, L., to which we at first thought it due. We could not, however, in any way account for the infection, as she had not been far away from the house, and no *Rhus* grew to our knowledge around the house, nearer than half a mile or so. She had been handling the stems of the Virginia creeper, and suspicion fell on this. The plants were cut down and the poison shortly after subsided.

"This is certainly not an absolute case, but about as sure as observation of this sort can be. A number of similar observations would surely satisfactorily show that in all probability under certain conditions the Virginia creeper may prove poisonous.

(Signed) "H. J. WEBBER,
"Shaw School of Botany, St. Louis, Mo., January 8, 1892."

In this connection I may refer to a report in the August-September number of the *Annales de dermat. et de syph.* for 1891, pp. 740, 741, taken from the London *Lancet*, to which my attention was kindly called by Prof. James C. White, of Harvard.

This gave an account of cases of eczema caused by "Virginia creeper," and made the statement that the botanical name of this creeper is *Ampelopsis Hoggii*. Recognizing that this was a mistake, Prof. White referred the matter to Prof. Goodale, of Harvard, who answered that *A. Hoggii* "is a large-leaved *A. Veitchii*," or Japanese ivy so called. In his letter Prof. White asks me the very pertinent question, "Was your case of poisoning by Virginia creeper produced by this plant (*A. Hoggii*), instead of by our *A. quinquefolia*?"

In view of the special knowledge possessed by the person identifying the plant, I think the question may be answered in the negative. However, I realize that the chain of evidence is not complete, and simply give the observation for what it is worth.

509 Ware Avenue, St. Louis, Mo.

A NEW VARICOCELE NEEDLE, AND HOW TO USE IT.

By Dr. W. W. BOWES,

Atlanta, Ga.

THE principle involved in the subcutaneous ligation of the spermatic veins for the cure of varicocele (Keyes's method) is a correct one, but the means at hand for its perfect accomplishment have been inadequate.

There were two leading objections to the needles in vogue for the performance of this operation: First, the almost impossible feat of returning the needle posteriorly through the place of entrance, and, if not so done, the engagement of the dartos with the ligature, which had to be torn through, making it very painful to the patient and liable to break the ligature; second, the danger with a sharp-pointed needle either in pricking the veins in going around them or of wounding the dartos in escaping them. The use of two needles is very unhandy.



The above needle, constructed for me by George Tiemann & Co., does away with both of these objections. It consists of a blunt-pointed needle, covered with a needle-pointed sheath running its whole length, the eye being opposite in needle and sheath, the sheath having a mark near its proximal end (see cut).

How to use the Needle.—The patient standing, with a pair of scissors curved on the flat, clip the hair very close on the upper scrotum, at junction to perinæum (shaving is not necessary), and bathe the region well in bichloride.

Now with left thumb and forefinger separate posteriorly the vas deferens from the cord, and, while holding the scrotal walls tightly, press the sheathed needle, threaded, through from before backward, putting a small velvet cork on the point of the needle. Now let the patient carefully lie down; the cork will prevent the needle from pricking the thigh in doing so. Unthread the needle, and well advance the sheath; the cork will now balance the sheath on the thigh and take care of itself. Now withdraw the needle till the eye is barely seen, go around the veins to the outside, hugging the dartos all the time, returning the needle posteriorly to the sheath, which latter may now be advanced till the mark on the proximal end is seen, the needle

entered the sheath, and both passed out posteriorly. Rethread the needle, giving it a roll to engage the thread, and withdraw anteriorly.

The ligature is now around the veins, but, instead of tying immediately, leaving a quantity of blood in the veins below the ligature to be removed by absorption, I raise the scrotum, let all the blood drain out, then complete the operation by tightly tying, cutting the ligature close, and dropping the knot in by raising the skin over the knot. A strong carbolized silk ligature is used. As I always do this operation without the services of an assistant the use for the cork is necessary.

Thus a varicocele is cured without cutting or bleeding or the use of anæsthetics, local or general, and with little or no interruption of the patient's business. The patients sometimes come quite a distance, are operated on, and return home on the next train; they do not go to bed, though it is a good plan to caution them against undue exercise for a few days, and to continue the use of a suspensory bandage for a month.

Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

239TH REGULAR MEETING, HELD ON TUESDAY EVENING, DECEMBER 18, 1894.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Prurigo Mitis.—Presented by DR. KLOTZ.

The patient was a girl, aged nine years, a native of Austria. The mother reported that the child had been suffering from an affection of the skin for the last six years, which regularly exacerbated in summer, but did not disappear entirely in winter excepting for very short periods. The patient was well developed for her age but very anæmic, and her features showed certain peculiarities found in those affected with prurigo. The skin of the face, principally the forehead, the lower parts of the arms, hands, and fingers, and in a milder degree the lower extremities, were affected. There were numerous small pale or slightly yellowish-tinted papules, not larger than a hemp seed, in part imbedded in the corium, in part more or less elevated, appearing singly or in groups. A few scratch marks were visible, but nowhere redness or other signs of hyperæmia. Itching was said to be present, particularly in the evening. Dr. Klotz said the case presented certain features of prurigo, without furnishing a complete clinical picture thereof. Several similar cases have been before the society, and he thought it important to collect all the evidence possible regarding them so as to gradually lead to a better understanding of the subject.

DRS. ELLIOT and SHERWELL agreed with the diagnosis of prurigo mitis.

DR. S. LUSTGARTEN stated that at a recent meeting of the society he had already expressed his doubts as to whether these cases should be classed under the heading of true prurigo mitis or that of chronic small papular urticaria—viz., lichen simplex chronicus of Vidal. In this case there were several points against the diagnosis of prurigo; among these might be mentioned the age at which the disease appeared, the exacerbations in warm weather, the absence of thickening of the skin, and the tendency to recovery.

DR. GEORGE H. FOX thought that the diagnosis of prurigo in this case should be based on the history of the eruption rather than on its appearance—at least at the present time. Its early development and its persistence lead one to accept the diagnosis of prurigo mitis.

A Case of Tubercular Syphilide of the Nose.—Presented by DR. P. A. MORROW.

The patient was a woman with extensive syphilitic infiltration, involving the tip of the nose, both alæ nasi, and the base of the septum. In appearance the case was very similar to one of rhinoscleroma. Dr. Morrow also exhibited a photograph of the patient, taken last June, which showed the lesion in a more aggravated form, and also numerous gummata on the arms and body. These have disappeared under specific treatment.

DR. SHERWELL said he saw the patient last March. It was diagnosed as a case of diffuse gummata, and under large doses of potassium iodide and mercury in various forms the lesions on body and limbs got well; those on the nose, however, proved very obstinate. Soon afterward he lost sight of the patient, and was interested in seeing how recalcitrant to treatment that particular site of lesion still was.

DR. GEORGE T. JACKSON made a diagnosis of tubercular syphilide. Lesions of this kind, he said, are often mistaken for lupus, and operated on. In one such case coming under his observation a frambesial syphilide developed about two weeks after the original lesion was excised. Lesions of this kind usually prove very obstinate to treatment.

DR. A. R. ROBINSON pronounced the case one of tubercular syphilide. Lesions in this region, he said, are often very difficult to cure.

DR. LUSTGARTEN said that while there was no doubt that the patient had gummatous syphilitic lesions, some of the features of the growth under the nose were atypical of syphilis. In this region there was a good deal of soft infiltration, and he was inclined to regard the growth as being due to a mixture of syphilis and lupus. He did not think that the case bore any marked resemblance to rhinoscleroma.

DR. KLOTZ thought the case was one of syphilis, and he did not think that the persistence of the fungous growth militated against that diagnosis. In syphilis it was not uncommon to see such products, which remain unaffected by general treatment. He advised the destruction of the mass with the Paquelin or galvano-cautery.

DR. GEORGE T. ELLIOT regarded the case as one of syphilis.

DR. MORROW, in closing the discussion, said that when the patient first came under observation, last June, the growth was increasing in size very rapidly. Under potassium iodide and mercurial plaster the local condition has improved, but the general health of the patient has declined. During the past five months she has lost probably twenty pounds. She is very cachectic, and is unable to take much specific treatment without showing

symptoms of gastric irritation. At present she is taking potassium iodide and cod-liver oil.

An Anomalous Case of Alopecia.—Presented by DR. GEORGE T. JACKSON.

The patient was a female, aged twenty-four years, single, employed in a candy factory. Her general health is good. Up to three months ago her scalp was normal, excepting that she had more or less dandruff. Then there appeared on the top of her head a pimple, from which the disease spread and a crust formed on the scalp. She was given an ointment by some doctor (the nature of which is unknown), and after this her hair fell out. When the patient first came to Dr. Fox's clinic, about two weeks ago, the scalp was moist and boggy, and presented all the clinical signs of an acute, moist eczema. The hairs were partially gone from the top of the head, and the inflammatory process extended into the sound hairs. The diseased area forms a large patch on the top of the head, which is bald, red, and covered with large, flat, adherent scales. Dr. Jackson said he had not examined the scales for parasites.

DR. C. W. CUTLER thought the case was one of eczema—possibly seborrhoeal eczema. Why it should be associated with loss of hair he did not know, unless the loss was produced by the application of some strong ointment.

DR. FOX said he has always laid stress upon the fact that eczema of the scalp does not occasion loss of hair. In this case, which he saw some days ago, the appearance of the patch was typical of moist eczema. The loss of hair in this case may perhaps have been due to deep pustulation.

DR. ROBINSON said that in very acute cases of eczema the hair may fall out from serous infiltration of the hair follicles.

DR. ELLIOT said he agreed with Dr. Robinson. He had seen alopecia occur in a number of cases of acute eczema of the scalp. In one seen last month the process was the result of some application made to the scalp by a hair-dresser. The entire scalp became the seat of a severe eczema, and the hair fell out over the vertex. Now that the process has subsided, the hair is growing again.

DR. KLOTZ suggested the possibility that the case might originally have been one of trichophytina of the scalp, although it was true that that affection is very rare in adults.

DR. JACKSON, in closing, referred to a similar case which he presented about three years ago (*Jour. Cutan. and Gen.-Urin. Dis.*, May, 1891). The patient was a young woman, who had a pustular eczematous lesion on the top of the head, which produced a loss of hair. Since then she has had a number of similar attacks, which always begin with an outbreak of pustules. The present case he regarded as one of dermatitis set up by some strong application.

A Case for Diagnosis.—Presented by DR. S. SHERWELL.

The patient was a Chinaman, aged forty-five years. He is engaged at laundry work in Jersey City. He came to the clinic, complaining of a loss of sensation in certain parts of the body. On examination, it was found that all four extremities were almost completely anæsthetic. Dr. Sherwell said he thought he found some thickening and induration of the ulnar nerve, and, while submitting the case for diagnosis, believed it to be one of commencing anæsthetic leprosy.

DR. MORROW said he was unwilling to accept the diagnosis of anæsthetic leprosy in this case on account of the lack of sufficient corroborative evidence. In all cases of leprosy coming under his observation there has been some pigmentation of the skin; there is none such in this patient. Enlargement of the ulnar nerve may be present in other conditions besides leprosy; he has seen it quite as pronounced as this in one case of paralysis agitans.

DR. LUSTGARTEN said he agreed with Dr. Morrow that this patient presents no evidence of leprosy excepting the anæsthesia. With leprosy he would expect to see some trophic changes in the skin or atrophy of the muscles.

DR. JACKSON said he would hardly venture to make the diagnosis of leprosy in this case. There certainly was anæsthesia, and the patient was a Chinaman. But it was not right to be influenced by the nationality in making a diagnosis of leprosy.

DR. SHERWELL, in closing the discussion, said he had only seen the patient once, and, reasoning by exclusion, he thought the case was probably one of leprosy. He stated that he intended to have the man examined by a neurologist, and would report developments at a subsequent meeting.

A Case of Tuberculosis of the Skin.—Presented by DR. CONDUCT W. CUTLER.

The patient was a man with tuberculosis of the skin, involving the dorsal surface of the thumb and forefinger of the left hand. The lesion first made its appearance about four or five years ago. In the center of the patch there is a cicatrix which is the result of an excision of some of the tubercular masses made two or three years ago. The disease has not reappeared at that spot, but is gradually extending at the periphery. The patient is also suffering from pulmonary tuberculosis, the left apex being seriously affected.

DR. MORROW said he regarded the case as one of tuberculosis of the skin.

DR. KLOTZ thought from the appearance of the lesion that the case might be one of lupus erythematosus.

DR. SAMUEL ALEXANDER referred to a case of tuberculosis of the hand which came under his observation last summer. Under ether he removed the diseased skin from the index finger and placed skin grafts over the denuded surface, which extended over two joints. The result was very satisfactory.

A Case of Psoriasis.—Presented by DR. FOX.

The patient was a man with an eruption covering the face, neck, trunk, and all four extremities. One peculiar feature of the eruption pointed out by Dr. Fox was that many of the lesions left a wrinkled, atrophied condition of the skin behind.

DR. ROBINSON said he agreed with the diagnosis of psoriasis. The white atrophied spots referred to by Dr. Fox were due to a loss of connective tissue, and some deficiency of the elastic tissue fibers. These spots, which he has observed in a number of cases of psoriasis, remain permanently.

DR. R. W. TAYLOR said he has observed similar spots in pityriasis rosea.

DR. FOX, in closing the discussion, said he has always been of the opinion that one peculiarity of psoriasis is that, no matter how extensive the eruption, it always leaves the skin in a perfectly normal condition when it disappears. It seems, however, that this is not so.

A Case for Diagnosis.—Presented by DR. KLOTZ.

The patient was a young man with a lesion about the size of a silver half-

dollar on the forehead, at the margin of the scalp. The patient stated that the spot had not existed from birth, although it had been there for several years, and was growing. It was partly covered with hair, and had a peculiar greenish or graphite shade—somewhat similar to the case presented by Dr. Lustgarten at a recent meeting, which was suspected to be a case of beginning sarcoma. The same suspicion had arisen in his mind regarding this lesion, although it might prove to be a simple nævus.

DR. LUSTGARTEN regarded the case as one of hypertrichosis. He saw no resemblance between this case and the one of flat sarcomatous infiltration of the skin which he presented at a previous meeting.

DR. ROBINSON said he agreed with Dr. Lustgarten.

DRS. FOX and CUTLER pronounced the case one of hypertrichosis of congenital origin. Also DR. JACKSON, who thought that the apparent pigmentation might be due to the hair which had become broken off short.

DR. KLOTZ said that in the evening the pigmentation was less pronounced than in daylight.

Dermatitis from Resorcin.—DR. R. W. TAYLOR reported the following case: The patient was a woman, aged thirty-five years, who had a very weak heart and a habitual pulse of 59 per minute. She also suffered from a typical seborrhœal eczema of the entire scalp, which was leading to thinning of the hair and premature grayness. She was given an ointment made up of one drachm of resorcin to an ounce of cold cream. A single application of this to the scalp set up a violent dermatitis, which extended to the ears, the forehead, and back of the neck, and proved very rebellious to treatment. The woman stated that some years ago she had used resorcin, and its application was followed by a similar experience. About ten years ago she suffered severely from ivy poisoning. She is also very susceptible to cocaine, a few minims of a ten-percent solution sprayed into the throat having produced dangerous symptoms. Dr. Taylor said he had prescribed resorcin in many cases, and never before saw any unpleasant results follow.

DR. JACKSON said that on one occasion he prescribed resorcin ointment of less strength than that mentioned by Dr. Taylor, and its application was followed by a violent dermatitis resembling erysipelas.

DR. ELLIOT said he has seen severe forms of dermatitis result from the use of resorcin.

DR. SHERWELL said he had observed mild forms of dermatitis in the region of the forehead and eyelids produced by the application of resorcin.

DR. LUSTGARTEN said he had several times seen resorcin produce spots of superficial erythematous dermatitis very itchy.

DR. KLOTZ said he had seen a mild dermatitis result from the use of resorcin on several occasions. By some authors it has been recommended that the drug should be dissolved in alcohol before it is mixed in a salve, to diminish its irritability, while others are of contrary opinion.

DR. SHERWELL said he always orders the drug to be well triturated with a few minims of water before it is mixed, and usually prescribes it in combination with salicylic acid, also triturated with a few minims of alcohol. In this way a bland unguent is composed, one less irritating to sensitive skins and more soothing and efficient in every way.

DR. ROBINSON reported the following case: The patient was a man, aged forty years, who had red hair. He suffered from an attack of alopecia areata,

which lasted for several months, and the hair then reappeared in white and black patches. At the present time about one sixth of his scalp is still devoid of hair, but there is not a red hair on his head. His beard is bright red.

Report of Cases presented at Previous Meetings.—DR. ROBINSON reported that his case of acute generalized lichen planus has improved very much under large doses of arsenic.

DR. KLOTZ reported that his patient with lesions on the nose, which most of the members had regarded as syphilitic, was made distinctly worse by mixed treatment. Under the renewed use of salicylic-acid plaster and cauterizations with silver nitrate the lesions have greatly improved.

DR. CUTLER reported that his case of lichen planus, which was referred to at the previous meeting, had almost entirely recovered under the use of potassium chlorate and dilute nitric acid, taken internally.

Pediculi Pubis.—DR. KLOTZ said that in several text-books he had observed the statement that the pediculus pubis was usually found attached to a hair head downward and close to the skin. According to this, the position of the insect would be an inverted perpendicular one. This, Dr. Klotz said, is not the natural position of the insect while at rest; he has always found it lying flat, very close to the surface of the skin, with its head in the hair follicle, and its claws or legs surrounding the hair. As soon as the louse is stirred up or touched it assumes the other position, which seems rather to be one of defense or protection than of rest. Dr. Klotz said he also wished to correct the statement made by Crocker that the nits are always situated close to the root of the hair; as a matter of fact, they may frequently be found at some distance from the skin and near the end of the hair.

DR. JACKSON said he has usually observed the position of the pediculus to be head downward. The nits, he thought, were deposited near the feeding ground, and were gradually carried away from the surface as the hair grew longer.

DR. CUTLER said he has repeatedly found the nits of the pediculus pubis at some distance from the skin—too far away, he thought, to be accounted for by the growth of the hair. In reference to the position of the louse, he has usually found it head downward.

DR. FOX said he has observed the nits of the pediculus capitis at some distance from the scalp. This might be accounted for by the rapid growth of the hair in that region. The hair about the pubes grows comparatively slowly.

DR. MORROW said that most vermin assume the inverted position in feeding.

A Case of Arteritis Syphilitica.—Reported by DR. KLOTZ. The patient was a man, aged fifty, who contracted syphilis about twenty-eight years ago, and was amply treated for it at the time. No symptoms of the disease were observed for twenty-five years. Lately he had been working hard, and worried a good deal. At times he drank beer in large quantities. On August 25th he reported that his right arm was not quite as strong as formerly, and that certain movements were rather awkward. For about a week previous the right index finger had become cold and blue, its sensibility was impaired, and at night it was quite painful. The thumb was also affected, but in a milder degree. On examination the index finger was found to be of a bluish purple color and decidedly cold to the touch; the nail had a pale, livid color, and

presented a number of red longitudinal stripes. A diagnosis of syphilitic arteritis was made, and potassium iodide ordered in thirty-grain doses.

DR. KLOTZ called attention to the fact that by prescribing potassium iodide in saturated solution, a considerable loss of the salt is entailed by evaporation, as shown by a white crust covering the neck of the bottle. He is in the habit of prescribing one part of the salt to two parts of water, the dosage being increased accordingly.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY : STATED MEETING, HELD ON TUESDAY EVENING, FEBRUARY 12, 1895.

DR. ALEXANDER W. STEIN, *Chairman*.

A Case of Multiple Chancres.—Presented by DR. F. TILDEN BROWN. The patient was a young man who first came under observation on January 11, 1895. He stated that one month previously he had had a suspicious exposure, and a few days ago he noticed some reddish spots on the prepuce. On examination, five lesions were found—two in the coronal sulcus, on each side of the frænum, and three on the mucous surface of the prepuce, about one eighth of an inch behind the corona. The lesions were small, with a slightly raised area of tumefaction which scarcely imparted the sensation of induration. The left inguinal glands were enlarged and indurated. When the patient returned, nearly a month later (February 9th), one of the lesions had disappeared ; the remaining four were very characteristic, and an additional lesion had made its appearance on the left side of the meatus. At this time the patient also presented a lenticulo-papular eruption on the abdomen and sides. There was also a slight urethral discharge.

DR. R. W. TAYLOR called attention to the fact that in some cases of supposed multiple chancres the lesions are merely the result of a simple inflammatory process, such as balanitis or balano-posthitis, or are due to irritative applications. They consist of little œdematous patches, which readily disappear under treatment. With true chancres, on the contrary, there is a small round-cell proliferation, which in the florid stage of the disease tends to luxuriate rather than to undergo retrogression.

DR. JOHN A. FORDYCE stated that the pathological investigations thus far made have disclosed nothing which is absolutely characteristic about the initial lesion of syphilis. There is a round-celled infiltration which differs little from that found in any inflammatory condition. In syphilitic lesions there is some special virus with which we are not yet acquainted.

DR. TAYLOR said that one characteristic of syphilitic lesions is that the inflammatory process rapidly extends along the course of the vessels, surrounding them with a coat-sleeve-like arrangement.

A Case of Gangrene of the Scrotum Secondary to Epididymo-orchitis.—Presented by DR. BROWN.*

* Will be published.

DR. JAMES P. TUTTLE said he had seen the reports of a number of cases of epididymitis, cystitis, etc., which were ascribed to the grippe. While that malady is, no doubt, justly responsible for a great many evils, he saw no reason why it should be considered the cause of these genital troubles. In Dr. Brown's case, the man's urethral condition would be a sufficient explanation for the onset of the epididymo-orchitis and the gangrene of the scrotum.

DR. TAYLOR said he regarded Dr. Brown's explanation regarding the possible ætiology of the scrotal condition a very probable one. Suppurating orchitis, sometimes going on to gangrene of the scrotum, is not infrequently observed in the course of infectious diseases, and there is no reason why it should not occur in grippe.

DR. C. W. ALLEN said that a number of cases of orchitis (not followed by gangrene of the scrotum, however) have been reported as complicating influenza ; in other infectious diseases this occurs quite frequently. In the majority of cases gangrene of the scrotum is the result of urinary infiltration. Such a case recently came under his observation.

The Present Treatment of Urethritis in New York.—DR. RAMON GUITERAS read a paper on this subject. He stated that the methods of treating urethritis in this city seem to be quite similar both in the public institutions and in private practice, and on the whole it appears to be both rational and conservative. The craze for examining the discharge for the gonococcus seems to have abated, and most men have arrived at the conclusion that in nearly every acute running case, and in by far the majority of the subacute cases and gleet, this germ is present. This puts the consideration of the disease on a similar basis to that of some years ago, and leads us to consider all such cases of evident acute and chronic urethral discharge as urethritis, and not by the names of gonorrhœa, specific and non-specific urethritis, strains, etc.

After discussing the various methods of treatment in vogue at the present time, Dr. Guiteras stated that the method by which he has obtained the best results is as follows : The acute stage he treats by diluents and anterior astringent injections. The diluent he employs consists of a tablet made by Fraser & Co., containing five grains each of the bicarbonate and citrate of potash, with enough citric acid to produce effervescence. One of these is taken every three hours in a glass of water. The astringent injection is a modification of Ultzmann's, and is composed of five grains each of sulphate of zinc, alum, and carbolic acid, with one drachm of glycerin to the ounce of distilled water. This is used three times a day after urinating and washing the anterior urethra with hot water. In rare cases, where there is a great deal of inflammation about the glans and prepuce, with perhaps glandular lymphatic complications, he does not give the injections, but simply the diluent, hot sitz baths, a purge, followed by Rochelle salts every morning, and plenty of water. The diet should also be regulated, and a suspensory bandage constantly worn. To catch the discharge a butterfly dressing should be worn. If the injection above referred to has no effect, he orders a stronger one composed of ten grains of sulphate of zinc and half an ounce of the colorless (Lloyd) fluid extract of hydrastis to four ounces of water. If this fails, he employs a still stronger injection—one of Ricord's favorites—composed of sulphate of zinc, ten grains ; acetate of lead, fifteen grains ; tincture of catechu and opium, each, one drachm, to four ounces of water. This course of injec-

tions, in connection with diluents, will usually cure an ordinary case of urethritis when no posterior urethritis occurs. If it does occur, the anterior injections are left off, but the diluents continued, with ten drops of tincture of belladonna in addition to check tenesmus. If the process is very acute the patient should be put to bed, allowing him to get up only for two hot sitz baths daily. He is put on a diet of milk and Vichy water. If the tincture of belladonna fails to control the tenesmus, suppositories of the extract of belladonna and morphine, each one quarter of a grain, are substituted. The bowels should be kept open. As soon as the symptoms abate somewhat he begins to give instillations of silver nitrate, one grain to the ounce, every other day at the beginning. The patient is given sandalwood oil, beginning with fifteen drops and increasing five drops each day ; or, instead, the santal-Midy capsules, beginning with one capsule and increasing the dose to three capsules daily. If this does not work well, he substitutes cubebs, copaiba, or the Lafayette mixture. If the discharge is rebellious and continues in a subacute form, he employs daily irrigations of a 1-to-3,000 permanganate-of-potash solution from a fountain syringe elevated two feet through a velvet-eyed catheter passed into the bulbous portion of the urethra ; if there is a subacute posterior urethritis associated with it, the fluid is allowed to run back into the bladder either by increasing the elevation of the syringe to five feet and compressing the meatus or by slipping the end of the catheter beyond the cut-off muscle. Where this fails he substitutes a weak solution of silver nitrate, beginning with 1 to 8,000 and increasing the strength to 1 to 1,000 if necessary. If a narrowing or stricture exists it should be dilated with the Oberlaender dilator or an ordinary Otis urethrotome. If the gleet discharge continues, an endoscopic examination should be made, and nitrate-of-silver applications made through it.

The conclusions drawn by the author in his paper were as follows :

1. That it is impossible to treat urethritis according to any given rule at the present day ; a successful method has not as yet been discovered.
2. That specialists are much better able to treat it successfully than the general practitioner.
3. That injections stopping all discharge or reducing it to a moisture about the meatus, such as those of bichloride, permanganate of potash, and nitrate of silver, are the most successful means of treating a fresh attack, and that of these, nitrate of silver is the one upon which most reliance can be placed.
4. That in all cases the patient should be treated conservatively, and the treatment should be modified according to the symptoms.

DR. C. W. ALLEN said he was sorry to hear Dr. Guiteras mention santal-Midy in his paper. The advertisements of this preparation are placarded all over the city, and there is no reason why the profession should advertise it still further. Just as good results, he thought, can be obtained from pure sandalwood oil prescribed in the ordinary way.

DR. B. E. VAUGHAN referred to the frequent occurrence of posterior urethritis in gonorrhœa. Of two hundred and seventy cases of gonorrhœa in the acute or subacute stage, evidence of a posterior urethritis was observed by the Ultzmann test in one hundred and eighty. In sixty of these it occurred during the first week, in thirty-one in the second week, in eighteen in the third week, and in the remainder in the fourth and fifth weeks. In ninety of the two hundred and seventy cases there was no evidence of pos

terior urethritis. These figures show that in over sixty-six per cent of the cases posterior urethritis promptly occurred.

DR. G. K. SWINEURNE said he thought a little more stress should be laid on the early treatment of gonorrhœa by means of anterior irrigations with hot permanganate-of-potassium solution. At the beginning he usually employs a solution of 1 to 2,000, gradually increased to 1 to 1,000, and as hot as can be comfortably borne by the patient. A small glass nozzle is introduced into the meatus, and the vessel containing the irrigating fluid is placed about a metre and a half above the patient's head. The benefit following this method of treatment is usually very marked, and complications, such as epididymitis, etc., are of rare occurrence. If necessary, the posterior urethra can be irrigated by simply holding the lips of the meatus tightly against the glass tube.

DR. GEORGE W. BREWER stated that the treatment of urethritis, as outlined by Dr. Guiteras, is both good and conservative, but the duration of these cases is apt to be protracted. He has found that the use of bichloride irrigations early in the course of an acute urethritis will cause the annoying symptoms to disappear more quickly than by any other method he has ever employed. In the majority of cases treated in this way the discharge will either cease entirely or become watery inside of a week or ten days. The sooner the discharge is stopped the less chance is there of inflammatory complications occurring. Out of two hundred and fifty acute cases treated with bichloride irrigations, such complications occurred in only two per cent; while out of three hundred and fifty cases treated at the same time by the ordinary methods, acute epididymitis occurred in sixteen per cent.

DR. H. G. KLOTZ stated that in the acute stage of urethritis he has often employed irrigations with bichloride or permanganate of potassium solution with very good results; such local treatment tends to mitigate the disease even though it does not cure it. For this purpose the fountain syringe is preferable to the hand-bulb syringe, as the injections are better borne by the patient. Formerly, he employed sulphate of thallin with very good results, even in the most acute stage of the disease. A seven-per-cent solution of this drug kills the gonococcus, or at least renders it innocuous. The objection to the use of this drug is its great expense. Another remedy which he has employed with very good results is salicylate of soda, given internally.

DR. GUITERAS then closed the discussion.

Experiments in the Treatment of Syphilis by Animal Blood Serum.—DR. BERNARD E. VAUGHAN read a paper on this subject. The idea of these experiments, the speaker said, was suggested by the fact that animals seem to enjoy immunity against the poison of syphilis. The serum employed was obtained from the blood of a horse, which was extracted from the jugular vein. The blood was left undisturbed for forty-eight hours, allowing the serum to separate, and then the latter was poured into sterilized receptacles, and finally put into half-ounce bottles, to each of which ten drops of a ten-per-cent solution of carbolic acid was added. The dose of the serum was three cubic centimetres, given subcutaneously, the injections usually being made in the thigh or penis. A syringe with an asbestos cylinder was employed, so that it could be boiled after each injection. These experiments, Dr. Vaughan said, were commenced about one month ago. Thus far twenty patients have been treated. In only two of the cases were the injections

followed by a rise of temperature. In four of the cases a slight urticaria appeared. There were no abscesses. The treatment seemed to produce a more rapid disappearance of the primary sore and the cutaneous lesions. In one case of secondary syphilis the injections produced an improvement of the symptoms. In connection with his paper Dr. Vaughan showed a number of patients who are now being treated with the serum. In one of these, a case of syphilitic epididymitis, the tumor has materially decreased in size since the injections were begun.

DR. R. W. TAYLOR said that in view of the fact that Dr. Vaughan's experiments were commenced so recently, little or no importance can be placed on the results thus far obtained. Syphilis requires three years to treat, and very little can be demonstrated in one month. In the cases presented no results were shown which could not have been obtained by injections of bichloride of mercury. It is well known that the roseola of syphilis will disappear without any treatment at all. The injections appear to have had no effect upon the glandular enlargements in the groin, which is the objective point of treatment.

DR. BREWER said he understood that this paper of Dr. Vaughan's was simply a preliminary report, and that he intended to present the patients again later on and report further progress. It will be very interesting to watch the results of the serum treatment in these cases, and compare them with others that are being treated in the regular way.

DR. VAUGHAN, in closing the discussion, said that thus far he claimed nothing whatever as the result of this method of treatment. His paper was simply a preliminary report.

STATED MEETING, HELD ON TUESDAY EVENING, MARCH 12, 1895.

DR. ALEXANDER W. STEIN, *Chairman*.

The Death of Dr. B. E. Vaughan.—Before taking up the regular business of the evening, Dr. R. W. Taylor, in a few appropriate remarks, referred to the untimely death of Dr. B. E. Vaughan, which occurred on the 4th inst.

A Case of Castration for Hypertrophy of the Prostate.—Presented by DR. H. LILIENTHAL.

The patient was a man aged fifty-six years, who for the past six years had suffered from frequent micturition, both during the day and night. About two years and a half ago he had an attack of retention, for the relief of which he had to be catheterized. These attacks were repeated at frequent intervals, and in the meantime there was increasing frequency in urination. Ten weeks ago he came to New York for treatment, and was admitted to Mount Sinai Hospital. At this time there was continual dribbling of urine, with violent tenesmus and an almost constant desire to urinate. He had a severe cystitis, and there was considerable albumin in the urine. Excepting for the latter sign, there was nothing to indicate renal trouble. Both the middle and the lateral lobes of the prostate were found to be very much enlarged.

Castration was performed on February 9, 1895, under chloroform anæsthesia. The man promptly recovered from the operation, and in five days was almost entirely well. The improvement in his urinary symptoms was very marked from the beginning. It is now over one month since the operation

was performed. The patient does not have to be catheterized at all, excepting to rid him of an ounce of residual urine. The urine has cleared up almost entirely. The man is able to go three hours without passing any urine. An examination of the prostate shows that it has become reduced fully one half since the operation.

DR. EUGENE FULLER, who had seen the patient before the operation was performed, said that at the present time the prostate is very soft and flabby, and there seems to have been considerable shrinkage.

Specimen of Enlarged Prostate.—DR. FULLER exhibited a prostate removed from a man aged fifty-eight years by suprapubic cystotomy. The enlargement of the gland in this case seemed to be due to a fibrous growth, which was readily shelled out. He was doubtful whether castration would produce shrinkage of a growth of this character. There was very slight hæmorrhage during the operation, and, with the exception of some symptoms of suppression of urine, the patient is now doing well. He referred to four other cases of this kind in which he operated, and in all of these the patients are now able to pass a good stream of urine.

A Case for Diagnosis.—Presented by DR. F. TILDEN BROWN.

The patient was a man aged thirty-one years. He was a plasterer by trade, and was in the habit of carrying lath-nails in his mouth while at work. About the 10th of December, 1894, he was exposed to venereal disease. Ten days later he noticed a slight excoriation on the penis, which lasted a few days and then disappeared. Whether this was a chancre or not Dr. Brown said he did not know. Two months later a general eruption appeared on the body, and the tongue became swollen and painful. At present there is a raised, indurated lesion on the upper surface of the tongue, extending nearly from the base to the tip, and over an inch in width. It is brownish-yellow in color. There is lymphatic enlargement throughout the body; the subhyoid glands as well as the anterior cervical are considerably enlarged. The remains of a macular eruption are still apparent on the man's thighs. Dr. Brown said that while the case was undoubtedly one of syphilis, he desired to get the opinion of the members regarding the nature of the lesion on the tongue.

DR. R. W. TAYLOR made a diagnosis of condylomata lata of the tongue, the papillary infiltration being probably due to the man's habit of holding nails in his mouth.

DR. JOHN A. FORDYCE made a diagnosis of papillary hypertrophy of the tongue.

DR. H. G. KLOTZ referred to the fact that in certain cases, especially in women and children, the initial lesion of syphilis resembles a secondary mucous patch. He did not, however, regard this as one of those cases.

DR. BROWN exhibited a drawing showing a well-marked chancre of the tongue.

Clinical Symptoms due to Chronic Perivesical Inflammation.—DR. EUGENE FULLER read a paper on this subject. After giving a brief review of the literature of chronic perivesical inflammation, the author stated that he would confine himself to the clinical side of the question. A condition of localized perivesical inflammation always follows to a greater or lesser degree the operation of suprapubic cystotomy. The antero-superior portion of the bladder wall becomes bound to the parietal structures, but this in no way interferes

with the function of the organ. The perivesical inflammation may have had its origin in a gonorrhœal or some other form of cystitis, or it may exist without any history of previous bladder trouble. In some cases it is due to neoplasm of the bladder, and in rare instances the inflammatory focus is independent of the bladder, and is connected with some near-by structure.

The most pronounced symptoms of this condition are those connected with urination. The capacity of the bladder is decreased, thus giving rise to frequent micturition, the quantity of urine passed each time being small. Ordinarily there is little pain associated with the act, and the urgency and tenesmus are slight. In the milder grade of cases active exercise tends to increase the frequency, so that at times temporary incontinence may occur. Dull pain in the back or perineal region may be complained of. Where a cystitis coexists, the pain incident to that affection is also present. Only a small amount of fluid can be injected into the bladder in these cases of chronic perivesical inflammation: forced attempts at injection will produce a prompt and strong return of the fluid along the catheter. In those cases where the resistance of the bladder wall is supposed to be due to hysteria or a neurosis of the bladder, the differential diagnosis can be made by administering an anæsthetic and then injecting the fluid.

In investigating these cases, a rectal and bimanual examination may reveal more or less abnormal resistance and induration of the tissues of the bladder wall. As regards treatment very little can be accomplished. Those cases originating from a cystitis may perhaps be benefited by long and persistent treatment. Hygienic measures may be indicated, with cod-liver oil and the hypophosphites. For local treatment, bladder gymnastics, so called, may be of some temporary benefit. They consist in regularly stretching the bladder wall by injections of warm antiseptic fluids, under carefully regulated pressure. Before concluding his paper Dr. Fuller related the histories of two of these cases coming under his observation.

DR. ALEXANDER W. STEIN said that in at least one of the cases reported by Dr. Fuller the symptoms might have been due to a contraction of the bladder walls, as the result of hyperplasia of the connective tissue and hypertrophy of the muscular fibers.

DR. SAMUEL ALEXANDER said he was hardly prepared to accept Dr. Fuller's explanation of the symptoms in all the cases reported. Those symptoms were not absolutely characteristic of a pericystitis. It is sometimes impossible to tell whether we have to deal with a pericystitis or an interstitial cystitis with thickening. The absence of pain on micturition, which Dr. Fuller mentioned as characteristic of this condition, is also frequently met with in old chronic cases of cystitis, with great frequency of micturition, and the urine loaded with pus. Bladder gymnastics were first advocated many years ago, and Dr. Alexander said he has never seen them do any good. On the contrary, this plan of treatment is apt to do harm. Any bladder which is affected with cystitis, or which has ever been the seat of a cystitis, should be kept as quiet as possible. The more distention it is subjected to the more congestion results, and any attempt to dilate it is injurious physiologically, and bad surgery.

PERIODICAL LITERATURE OF DERMATOLOGY, SYPHILIS, AND GENITO-URINARY DISEASES.

COMPILED BY

GEORGE THOMAS JACKSON, M. D.

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Original Communications.

ON SOME AFFECTIONS OF THE NERVOUS SYSTEM OCCURRING IN THE EARLY AND LATE STAGES OF ACQUIRED SYPHILIS.

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THE surgeon and syphilographer who sees much of syphilis from the time of the initial lesion until the disappearance of the so-called secondaries is very apt to have a different idea of the benignancy of syphilis than the neurologist. A very large proportion of organic disease seen by the latter occur sequentially to syphilis, even if syphilis can not be postulated as actually causative; and from a consideration of these cases he is liable to reach the conviction that syphilis is a disease much more destructive and malignant and non-amenable to treatment than the facts actually warrant. The pessimistic views which we are attributing to neurologists are offset, however, by the opinion of the surgeon and dermatologist, who not infrequently are decidedly optimistic, and who believe that the consequences of syphilis are extremely exaggerated, and what are ordinarily called sequences are often only accidental. At the end of the eighteenth century John Hunter and Astley Cooper said that the brain was an organ inaccessible to the syphilitic virus. At the end of the nineteenth century Mauriac says, "Syphilis attacks with deplorable frequency the brain of our generation." To illustrate the divergent opinions that are held concerning the curability of syphilis to-day, the two following quotations will suffice. Dr. G. H. Fox, who is favorably known as a dermatologist, says, "If properly treated it is one of the most eminently curable diseases." (Paper read before the New York County Medical Society, January, 1895.) On the other hand, Gowers, whose

reputation as an astute clinician and scientific neurologist is unimpeachable, says in his brilliant lectures on *Syphilis of the Nervous System*, "Make what deductions you can for the mild and latent forms of the disease, recognize all our powers of repression, and the fact still remains that we have yet to find the means of arresting it." And again in the same lectures, "There is no real evidence to show that the disease ever is or ever has been cured."

Allowing all conceivable latitude for the different point of view of each of these observers and for those who respectively share their opinions with them, it does not seem possible that we can concede that both are right. That the views held by both of the authors quoted are extreme there can be no doubt, and in a measure equally erroneous; but the statement of Gowers is much less baneful in its teachings than the one which asks us to believe that syphilis is not only a benign but a much-maligned disease.

If it be true, as we contend it has been proved to be, that nearly ten per cent of all cases of syphilis, including those that have been treated and not treated, show ulterior manifestations of the disease sometime later in life, the inculcations of doctrines of eminent curability such as those we have quoted can not fail to do harm—just as the advocacy of the innocence of typhoid fever would be harmful; yet the mortality rate in the latter, when properly treated, is not above ten per cent.

Although I do not by any means mean to classify the rank and file of surgeons and neurologists as followers of the two authorities mentioned, yet it is probable that those who agree with them are the rule and that the others are the many striking exceptions. Of the exceptions the greatest number would be among the neurologists, the larger proportion of whom do not subscribe to the extreme views of Gowers. Although neither of the two may need a champion, the truth is that they have each reached their convictions largely if not entirely on account of their different points of view. The surgeon, especially if he is a specialist of genito-urinary diseases or dermatology, sees the constantly increasing number of cases of syphilis in their incipiency, and fortunately, as they are not patients of the vacillating and migratory type, and as it is given to them to see early the beneficent effects of treatment, they remain with the physician of their first choice until they are discharged cured, a period varying from a few months to a few years depending upon the physician, from the date of the last manifestations. On the other hand, such patients later in life have symptoms of neuralgia, neurasthenia, spasms, paralysis, eye symptoms, anæsthesias, and the like; they do not return to him who treated and "cured"

them of the syphilis, but to the general practitioner and neurologist, and it is from such vantage ground that the latter has his "point of view." Is it therefore surprising, one asks, that their opinions should differ so materially from the surgeon's? The moral to this statement of fact is, that the surgeon should receive from the neurologist on faith, and as truth beyond peradventure, the fact that a vast majority of the cases of organic disease which he is called upon to treat would not have occurred if the patient had not had syphilis.

The object of the writer of this article is not to contribute anything new to the subject of syphilis of the nervous system, but merely to bring before the surgeon for his thoughtful consideration the side seen by the neurologist.

Syphilis of the nervous system is not different from that of syphilis of any other part of the body, except as it is impressed by the histological peculiarities of the parts which are involved. It is characterized from an anatomico-pathological point of view by the formation of feeble tissue, which is made up in a great part of small, friable, round cells with relatively large nuclei and excessive vascularization. These cells when conglomerated form the gumma, the granulome, the syphilome. When formed, it has no tendency to resolution, but, on the contrary, it has a special predilection to undergo softening, to break down, slough, and leave an ulceration or the remains of ulceration which is filled up with reparative products in the shape of vulgar tissue that has been produced to cover the ulceration. This new growth, or the consequences of repair following its breakdown, is the *materies morbi* in syphilis of the nervous system. It attacks almost exclusively the membranes of the brain and cord, the blood-vessels of the nervous system, especially the veins and the peripheral nerves; and the symptoms resulting differ as do the parts involved.

The *dictum* that syphilis in its early stages attacks only the skin and mucous membranes has been shown to be absolutely without foundation in fact. It was believed until quite recently, and is yet by many, that nervous affections of syphilis were limited to the tertiary stage of that disease, and that cases reported as occurring during the secondary manifestations were but evidence of a precocious tertiary stage. Any number of observations corroborated by pathological findings have been made to disprove such an assumption. In fact, it is not at all improbable that nearly as many cases of syphilis of the nervous system occur during the early stage as during the late, and although no hard and fast line of demarcation can be made between the secondary and the tertiary stages, those cases in which the nervous system is involved before the end of the second year after infection

may be considered as early manifestations of the disease. Relative to the frequency of early and late syphilitic manifestations we can not at all agree with Sachs,* who says that affection of the nervous system is a late development of constitutional syphilis, and that is sufficient. Not infrequently it is decidedly an early manifestation, and it is the dissemination of this fact which we consider to be so important.

The division of syphilis into the secondary and tertiary stages, except as a chronological index of their manifestations, is not an accurate one. Pathologically, the division proposed by Leloir, who classified its manifestations into *syphilomes résolutifs* and *syphilomes non-résolutifs*, is the more preferable one.

The fact that the number of cases of involvement of the nervous system during the secondary or blood stage of syphilis is so great—the stage in which the patient is still in the hands of the surgeon—is a very cogent reason for asking the latter's attention to them, as the recognition of the gravity of symptoms occurring at such a period in the evolution of syphilis is a hundred times more important than a like amount of perspicacity later; for in the first instance the disease is not only a danger to the patient himself but a menace to the community, while in the tertiary stage it is dangerous only to the individual. And, again, the responsiveness to treatment during the secondary stage is in marked contrast to the powerlessness of drugs and therapy in the tertiary stage.

The proportion of patients who develop symptoms of brain syphilis after infection is differently estimated by different observers. Fournier (*Les Affections parasymphilitiques*), whose opportunities for studying the subject on a large scale have been enormous, has estimated it at twenty-one per cent. Hjelmman (*On Hirnsyphilis, des Frekvens, Kronologi, Etiologioch Prognos*, Helsingfors, 1892) gives about twelve per cent. The same or a greater proportion may be assumed for those who have symptoms of spinal-cord involvement. It must be remembered that tertiary syphilis is a stage of the disease which every one who has contracted syphilis is not obliged to undergo. In fact, a goodly proportion of all cases of syphilis do not show any manifestations beyond the exanthemata. The percentage of cases that reach the tertiary stage has often been carefully determined, and most authors are agreed that it is from twelve to twenty per cent. Haslund found that of 6,364 patients under his immediate care for syphilis 791 were cases of tertiary syphilis (*British Journal of Dermatology*, p. 210); that is a percentage of 12.4 per cent. Mauriac thinks that in Paris the percentage may be

* MORROW'S *System of Genito-urinary Diseases*, 1893, p. 475.

estimated at five to fifteen or twenty per cent., the lower numbers referring to patients treated privately, the higher numbers treated in hospitals during the secondary stage. These figures correspond very closely to those given by Rollet, Vodja, and others, and may be taken as justly reflecting the consensus of opinion of syphilographers. As to the systemic distribution of these tertiary manifestations there is not such unanimity of opinion, except in so far as all are agreed that the skin is attacked most frequently. After the skin, I think it must be conceded that the nervous system is most frequently the seat of disease. Statistics on this point are conspicuous by the different percentages given by different observers. Fournier says that out of 3,429 cases the disease was situated in the nervous system in 1,085. Haslund's most careful investigation of the 791 cases mentioned above gives practically the same percentage. The factors which predispose the nervous system to become the seat of syphilitic disease or syphilitic manifestations are not hard to determine. They are exactly the same influences which facilitate the development and occurrence of diseases of a chronic course and of a degenerative type in any other part of the body. Such causes are inherited and acquired. An individual whose heritage is epilepsy or insanity, or what we may call, in lieu of an accurate term, a neurotic diathesis, will be very much more apt to have one of these conditions brought into activity by syphilis than a person who has no such inherited proclivities. The personal predisposing causes are excesses of any kind, whether such be laudable or condemnatory, and especially excesses in alcohol or combined with alcohol, such as those of sexuality. Trauma is to be placed in the same category with excesses, for if the trauma be not sufficiently severe to produce apparent injury our idea is that it acts quite as do excesses. At certain periods of life, such as immaturity or decadence, there is always shown a tendency to yield to slight exciting factors. Probably the most serious element in the occurrence of nervous syphilis is the lack of early, vigorous, and continued treatment dating from the first constitutional manifestations.

Syphilis as it affects the nervous system may be considered, for the sake of convenience, according to the portion of the nervous system which it attacks, as—

1. Cerebral. Spinal. Cerebro-spinal.
2. Peripheral. (a) Neuritis. (b) Neuralgia. (c) Claudication.
3. Neurasthenia.
4. Convulsive.

The cerebral diseases produced by syphilis vary as do the tissues involved. The diseases which are found most frequently with early syphilis are those dependent upon affection of the blood-vessels. This

affection of the arteries is of the nature of an arteritis, consisting of a proliferation of the tunica intima which in turn encroaches upon the lumen of the vessel and produces obliteration partial or complete. Varying opinions have been advanced as to the primary seat of syphilitic disease of the blood-vessels. Friedlander, Baumgarten, and Lancereaux believe that changes are first to be found in the tunica adventitia. On the other hand, Rumpf believes that the vasa vasorum are at the bottom of it and that the muscular coat is primarily diseased. Decision on this point is desirable but not absolutely necessary. The consequences of such obliteration will depend on the rapidity with which it has occurred. If, for instance, the lenticulo-striate branches of the middle cerebral artery be blocked up, and that rapidly, a hemiplegia of the opposite side will result, while a like affection of one of the arteries going to the cortex would cause only symptoms of a partial brain anæmia.

The next most frequent pathological formation, the gumma, solitary or diffuse, has its starting point in the meninges; and of the meninges the pia mater is oftenest involved. These new formations have their origin in the neighborhood of blood-vessels and not infrequently by their growth they encroach upon important vessels and are accompanied by symptoms directly referable to that. In other cases pressure upon one of the cranial nerves will abolish partially or completely its function. The same may be said when it presses upon specialized parts of the brain, such as the motor area, the visual area, etc. When the neoplasm occurs in the pons, the medulla, the crus, etc., the symptoms will vary according to the encroachment and the amount of destruction which it produces. A third form of new formation is diffuse infiltration, which consists of proliferation of round cells around capillary blood-vessels and into the surrounding connective tissue. This process ordinarily goes on in the pia mater and constitutes a leptomeningitis, which in turn may extend to the other membranes, thereby causing arachnitis and pachymeningitis. This leptomeningitis does not differ in its clinical manifestations from leptomeningitis resulting from other causes, except in its manifold symptomatology which indicates the diffuseness of the pathological process. These three different forms of brain disease, the vascular, the gummatous, and the leptomeningeal, will include the preponderant number of cases of brain syphilis. It is not intended to in any way discuss the symptomatology of these diseases, for that might be made as extensive as the discussion of brain disease in general, for it will be readily seen that it comprises the symptomatology of lesions of the substance of the brain, a discussion of the symptoms produced by an interference with the blood supply

and lastly those due to acute and chronic inflammation of the coverings. In passing, however, a fact that has been impressed by Sachs is worthy of mention, and that is in reference to the symptomatology of brain syphilis, viz., that most characteristic is the extreme variability of the symptoms—one day most alarming symptoms, which in turn may disappear within a few hours or days. And again the disproportionate relation between the extent of the area affected by syphilitic disease and the slight intensity of the disease in any given area is characteristic of the specific process. (New York Neurological Society, April, 1893.)

Of the diseases of the brain, one, which is relatively infrequent, has syphilis for the most important aetiological factor in a very large proportion of cases—viz., general paresis or dementia paralytica. Since the time Esmarch and Jassen originated the idea of the importance of syphilis in the development of general paresis an enormous literature has grown up to prove this aetiological feature of general paralysis. Many writers on this subject differ radically as to the frequency of syphilis in the preceding history of those who afterward show this form of insanity. Mickle has recently collated the average of thirty-two sets of statistics (*Brain*, spring, 1895), and states that the total average of all this number is upward of fifty per cent. General paresis, although it does occur in syphilitics in such enormous proportions, can not be considered strictly as a syphilitic disease, or at least the pathological changes which are found in general paresis are not those we can with our present conceptions of pathology reconcile as syphilitic. Very many clinicians—Mickle (*British and Foreign Medico-Chirurgical Review*, July, 1876), Peterson (*Journal of Nervous and Mental Diseases*, 1891), and others—have noted the existence of the pathological changes of brain syphilis and general paralysis existing in the same brain when examined at the necropsies, and some would call these pathological changes in general paralysis a fourth stage of syphilis. That the ordinary lesions in general paralysis do not correspond to syphilitic processes from a pathological standpoint should not be given too much significance as corroborating the so-called duality of general paresis. We have not reached a sufficiently advanced knowledge of the real nature of the syphilitic poison to theorize what the resulting pathological process shall be in the various stages of its development. The real microbe of syphilis is yet to be discovered, and until it is found we can not speak with positiveness, no matter how strongly we believe that there is a pathogenic germ of syphilis, nor can we legitimately advance theories which require such a discovery for their tenability. Yet it is necessary, in order to get

a clear grasp of the disease, to concede its germ origin, and to contrast its course and pathological results with other diseases of similar origin. Like them it has a point of invasion, a *locus resistantiæ minoris*, a period of development, and later manifestation and sequelæ, partaking of the nature of inflammatory processes and post-inflammatory degenerations, and all these during what may be called the reign of the germ. Further, in order to get a proper conception of those two diseases, locomotor ataxia and general paresis, which occur sequentially to syphilis in such an astounding number of cases, it is necessary to grant that the sinister work of the pathognomonic germ has been taken up by a toxine, the result of the latter's vital activity, and that it is a toxine which is the cause of those late syphilitic manifestations characterized pathologically by degenerations *ab initio* in contrast to those arising post-inflammatory.

Without such concession we are unable to understand the genesis, the microscopical findings, and the non-amenability to specific treatment of these diseases. It is probable that the matter of relationship of syphilis to general paralysis simmers down to the fact that there is an early syphilitic and a late syphilitic general paralysis, and that the pathological change in early syphilitic general paralysis is, as Raymond has recently stated it to be (*Archives de neurologie*, January, 1894), a diffuse embryonic meningo-encephalitis; that is, a chronic interstitial inflammation having its starting point in the capillaries of the brain, particularly in those of the cortex cerebri; the eventual lesion being in the capillaries, an infiltration of the adventitial sheaths by embryonic cells with rounded nuclei, diffuse or nodular periarteritis, and secondary obliterative endarteritis; in the veins, diffuse or nodular infiltration by similar cells in the musculo-connective-tissue coat. An analogous pathological process in the meninges, in the spinal cord, and even in the peripheral nerves gives the common findings in general paralysis. The time of appearance of symptoms of brain syphilis after infection is not such an uncertain one as was once supposed. Hjelmman says that most cases of brain syphilis occur in the first years of the syphilitic diathesis, and in each subsequent year the number gradually diminishes. After the twentieth year its occurrence is most rare. The different brain affections of syphilis differ in their time of appearance; the vascular and meningeal affections being the earliest, general paresis the latest. The interval between primary infection and the onset of general paralysis is given by Houbert as from five to nineteen years, by Westphal as from one and a half to twenty-three years, and by Mickle from five to twelve years.

It is not uncommon to see cases presenting symptoms of syphilis of

the brain a comparatively short time after infection and under proper treatment recover, then years afterward to see them develop some disease of the nervous system which has syphilis as an aetiological factor in an enormous proportion of cases, such as tabes; the clinical picture then is made up of some symptoms attributable to the original lesion and in addition those dependent upon the more recent lesion. A case of this kind recently under my observation illustrates this, and may be summarized briefly as follows: Mr. X., male, thirty-nine years old; occupation, policeman. Denies initial lesion, but says that when about seventeen years old had a sore on inside of lip which was slow to heal, and for which he was told by a physician that he would have to take internal treatment for some time. In view of the later developments in this case it must be conceded, I think, that this labial ulcer was the initial lesion. Two or three years later he had an attack of right-side hemiplegia, which came on slowly and which had been preceded by the ordinary forebodings of cerebral thrombosis. The hemiplegia was complete and associated with motor aphasia, but no loss of consciousness. As there was no cardiac valvular trouble, and as the patient had not suffered acute disease of any kind, and particularly as he recovered in a few weeks under vigorous antisyphilitic treatment, the attack was probably dependent upon luetic disease of the cerebral blood-vessels. Then for fifteen years he continued well, for the last ten of which he has done patrol duty. During the past year he has developed athetoid movements in the right hand, which indicate a central irritation in the motor tract, probably at the site of the old thrombosis in the internal capsule; in addition to this he has unilateral reflex iridoplegia and symptoms of beginning tabes, such as loss of knee jerks, band sensation about the calf and chest, benumbing of sensibility, and loss of sexual potency.

Another instance of a case of cerebral syphilis which was preceded by manifestations of syphilis in the shape of an arthropathy is illustrated by a patient recently under my care in the Hospital for Nervous Diseases. I. D., twenty-six years old; by occupation a caster of horoscopes; says he had sore on the penis a few years ago, for which he received no treatment except local applications. About four months before the onset of the attack which was the cause of his being brought to the hospital he noticed an enlargement of the left knee. There had been no injury to it, and he could not say just when the swelling had set in. It was never very painful, but worse at night. On examination there was no fluctuation. The whole joint seemed enlarged, and motion was almost completely absent. A few months after its appearance he had an attack of left-side hemiplegia, which came on in a

fashion characteristic of thrombosis—i. e., preceded for a variable time with headache, feelings of stupidity and drowsiness, then a gradual evolution of the hemiplegia. Complete recovery from the hemiplegia resulted in two months under the influence of most energetic "mixed" treatment. The arthropathy was very much improved, but has not yet completely disappeared. The arthropathy is probably dependent upon degeneration of the peripheral nerves and the syphilitic virus is responsible for that.

A third case of brain syphilis, in which the manifestations of the disease occurred early and the results of the lesion still continue, is illustrated by a young woman now under observation. She is twenty-nine years old, single, by occupation a domestic. Two years and a half ago she had a chancre, which was followed in six weeks by a roseola. She was treated in the City Hospital for one month, and took medicine for two weeks after leaving there. Aside from that she had no treatment. A few months later she developed some skin lesion, and was again treated in the hospital for a few weeks. As soon as the sores on the skin were healed she left the hospital and returned to work. During this time she suffered a great deal from nocturnal and diurnal headache and from indigestion. One morning she awakened and found that she was paralyzed on one side of the body and that she could not speak—that is, the patient developed a cerebral thrombosis within one year from the time of the primary lesion. She was now entered in the Hospital for Nervous Diseases, and the aphasia and hemiplegia cleared up rapidly under vigorous antisyphilitic treatment. About a year later, the patient developed a most typical athetosis in the hand of the hemiplegic side, and she again entered the hospital, where she now is under treatment, but, like so many other cases of syphilitic sclerotic lesion, the athetosis remains unamenable to treatment.

(To be continued.)

Exanthemata from Antipyrine simulating the Roseola of Syphilis. (*Ann. de dermatologie*, No. 3, 1894.)

Dr. L. Wickham, of Paris, reports a case which came to Fournier's department of the Saint Louis Hospital with an exanthem which Fournier and all that observed it declared at once to be a syphilitic roseola. The patient presented no other sign of the disease, and denied energetically the possibility. It was found that the eruption had appeared after he had taken for two days two-gramme doses, per diem, of antipyrine. Fournier also mentions a case of exanthem from this same drug which completely simulated measles, as it was accompanied by fever, conjunctivitis, lachrymation, and coryza. Still, there was no bronchitis, but frequent vesical tenesmus.

F. H. PRITCHARD.

RECURRENT ZOSTER.*

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IT has long been known that zoster, in the vast majority of instances, occurs once only in the lifetime of the individual.

Exceptions to this law have, however, from time to time been noted. It is my intention in this paper to give a brief notice of as many of these as I have been able after a diligent search to gather, to classify them according to what seemed the most natural method, and in this way possibly to facilitate a better understanding of their ætiology and pathology.

Those dermatoses which depend for their causation on alterations in the nervous system are perhaps the most interesting because the most obscure, and among these zoster stands as a type-form. A study of those cases which depart from the usual type may perhaps—paradoxical though it seem—throw most light on the questions at issue in regard to this disease, inasmuch as it permits us to shift somewhat our point of view from its accustomed place, and because, through the rifts these cases present in the usual symptomatology, there may penetrate some ray on a dark subject.

It was found necessary, in order to conduct any approach to a complete survey of the subject, to include in it cases reported under the title *chronic zoster*. These naturally belong to the same class, and it would be difficult to draw a dividing line between them and cases of frequent recurrence. In fact, the majority of “chronic” cases are made up of overlapping crops of vesicles, and therefore really present no essential difference.

I have also included certain cases of recurrent bullous manifestations which seemed to differ from the commoner form only in the size of the lesions, a circumstance that does not afford ground for a generic differentiation.

It might readily be objected that a number of the cases collated are not zoster in the true sense of the term. With this objection I should be the first to agree. Indeed, as I shall have occasion to explain later, I incline to the way of thinking of those who, like Hardy,¹ for

* Read before the American Medical Association, Section on Dermatology and Syphilography, Milwaukee, June, 1893.

example, object to giving the name of *zona* to *zoniform* diseases occurring after traumatism and in other ways.

I shall arrange the cases as follows:

Group 1. "Chronic zoster" (usually limited to one site).

Group 2. Cases recurring several times or frequently.

Subgroup A. Frequent recurrences at same area.

Subgroup B. Several recurrences, at varying sites.

Subgroup C. Several recurrences at the same and again at a distant site.

Subgroup D. Several recurrences, sites not definitely stated.

Group 3. Single recurrences.

Subgroup A. At same site.

Subgroup B. At a distant site.

Subgroup C. At a site not definitely stated.

Group 4. *Zoster gangrænosus recidivus atypicus hystericus.*

Group 1.—"CHRONIC ZOSTER."

Of the eight cases collated under this head the last two were of traumatic origin. Three (Leudet's first two cases and von Baerensprung's) were in phthisical subjects, and a direct connection can be traced between the tubercular deposit and the herpes.

Case I.—Burserius² (*old woman; herpes below left scapula, lasting several months; burning pain and neuralgia.* Quoted by Rayer).

"*Zoster acutus et brevis ut plurimum morbus est; nam quamquam Lorryus et chronicum, et interdum epidemicum esse existimet . . . hanc speciem tamen diutinam non vidi, nisi semel in vetula, quam stigmata pustularum sub omoplate sinistra ad aliquot menses summo cruciatu atque ardore pertinaciter divexarunt.*"

Unfortunately, I could not gain access to Lorry's chronic case or cases referred to by Burserius.

Case II.—(Leudet's³ first case. *Phthisical woman; left intercostal herpes resulting in ulceration lasting two months.*)

Woman aged forty-five. Slow phthisis for several years; consolidation with some softening of the right apex. Considerable involvement of upper half of left lung. Herpes between fourth and sixth ribs of left side, extending forward to axilla, which left ulceration bearing moist crusts and surrounded by violaceous areola with infiltration. These were present at the end of two months. There were frequent exacerbations of pain accompanied by increase of secretion from the ulcerated surfaces. Entire involved area anæsthetic.

Case III.—(Leudet's second case, *loc. cit.* *Phthisical woman; left intercostal herpes resulting in ulceration lasting six months.*)

Consolidation of both apices. Herpes between the third and fifth ribs of the left side. The resulting ulceration, crusting and infiltration continued as long as the patient remained under observation, a period of six months. Partial anæsthesia.

In the two preceding cases the seat of the herpes coincided with that part of the lung most involved.

Case IV.—(*Von Baerensprung's*⁴ *celebrated first case.*)

Phthisical child. Intercostal herpes. Relapse of ulceration two weeks after first healing. Death. *Post-mortem* showed extension of process from adjacent lung to spinal ganglia of involved nerves and portions of nerves issuing from ganglia.

Case V.—Jewel.⁵

Femoral zoster preceded by violent uterine pains. The uterine trouble being cured, the zoster disappeared.

Case VI.—Milton⁶ (*bilateral herpes of face in boy, continuing with frequent exacerbations for over six years*).

Boy, showed vesicles on the cheeks soon after an attack of typhus. From that time and until he passed from observation—in all, six years and three months—was never free from them. A fortnight never passed without some vesicles appearing, and generally a distinct relapse, so that the condition was made up of overlapping attacks. They were always preceded by stiffness, burning and itching of the skin. The vesicles varied in number from eight or ten to twenty or thirty. They were all flat and some umbilicated. The general health remained excellent. The following was noted on the presentation: On the ears were scabs, while from ear to ear stretched a broad, irregular band of scattered vesicles and cicatrices. This band was an inch broad where it crossed the bridge of the nose, but farther back it extended to the angle of the jaw. The upper margin lay just below the eye. The vesicles were in all stages—some perfect, some having concreted into crusts, firm and brown.

Milton (*loc. cit.*) also refers to the case of a man who “suffered from herpes of the face for eighteen months.” This observation is evidently too meager to be of use.

Case VII.—Duhring⁷ (*dermatitis vesiculosa neurotraumatica of forearm*).

Hysterical woman, aged twenty-nine, was burned on *flexor* surface of the left forearm over an area size of a silver dollar. Healed slowly and a month later broke out anew, showing a gangrenous patch which remained six weeks. The patch and the whole forearm became reddened, swollen, and tender, and the site of throbbing pain. This symptom continued to recur every few weeks. About six weeks after the acci-

dent there appeared a vesicle on the *extensor* surface. This ulcerated and crusted and other papulo-vesicles, vesicles, and blebs appeared near it, until the lower half of the forearm was involved and encircled by the disease, consisting of a chronically inflamed, vesicular and bullous, herpetic-looking, more or less crusted, scarred patch. "It possessed at first sight the general appearance of an injury due rather to the local action of an acid, or to some chemical substance, than to disease from within . . . The crusts were depressed, saucer-shaped, and adherent to the skin in the center, with everted edges. They were variegated in color with bluish or blackish tints." Eighteen months after the accident the condition persisted with but slight alleviation.

The resemblance of this case to Kaposi's zoster gangrænosus recidivus atypicus hystericus is striking, and consists in the presence of gangrene, in the appearance of the lesions as though produced by a cauterant, in the appearance of new lesions in the neighborhood of old ones, in the successive exacerbations, and in the presence of hysteria. On the other hand, it differed in being continuous, in the extent of territory involved, in the absence of a centripetal march, of a circinate arrangement, and of a keloidal appearance of the resultant scars.

The natural suspicion that the lesions were self-inflicted by the use of a cauterant, in this case as well as in Kaposi's, is negatived by the standing of the observers who assure us to the contrary.

Case VIII.—Galton^a (*traumatic neurosal pemphigus*). Quoted by Duhring, *loc. cit.*

Girl, aged seventeen, epileptic. Accidentally chopped off distal phalanges of index and ring fingers, and cut through middle phalanx of middle finger. Wounds remained open three months. Shortly afterward patches of redness, followed by blebs, appeared on the left wrist, hand, and arm. The eruption would spread rapidly, so that sometimes within a quarter of an hour the whole hand and arm would be covered with blebs. Fourteen months after the accident a crop appeared on the left leg. A month later she had a slighter return of vesicles, and since, for the next two years, only occasionally a few vesicles. They were in patches on both surfaces of the forearm in the area of the median and ulnar nerves.

Leudet's third case (*loc. cit.*) seems hardly worthy of the name of chronic. At all events, the facts given are too few to give it much scientific value.

Of the cases included in this group Milton's is the only one showing a bilateral distribution, and Galton's the only one in which there occurred a manifestation at a distant site. As I am forced to admit that there are other points in which it does not accord with the gen-

eral characters of the group, I may formulate the following general law: *Zosteroids presenting overlapping crops remain limited to one nervous area.*

I shall give later my reasons for using the word *zosteroid*.

Group 2.—CASES RECURRING SEVERAL TIMES OR FREQUENTLY.

Subgroup A.—Frequent recurrences at the same area.

Case IX.—Hitherto unpublished (recurrent patch on forearm).

Woman, aged thirty-nine, presented herself at my clinic at the St. Louis Medical College. Thirteen years ago she noticed on the inner aspect of the forearm, two inches and a half above the head of the ulna, a little red spot crowded with pinhead-sized, firm pustules. This was preceded by pain down the inner border of the forearm, hand, and little finger to its extremity. The outer border of the latter was never affected. In three or four days, when the eruption was well out, the pain subsided. This has occurred every five or six months since, the eruption occupying each time the same identical spot. The last attack was more severe than any of the preceding, and left a scar, which is depressed, violaceous, and about half an inch in diameter.

Case X.—Gibson⁹ (single recurrence of small patch on the forearm).

Man, attacked during winter months of two successive years by a patch of herpes preceded by severe neuralgic pains, and strictly limited to a small area on the back of the forearm supplied by one of the minute dorsal branches of the left ulnar nerve. A singular coincidence was that his daughter had a precisely similar affection at a precisely similar spot, but on only one occasion.

Although this is a case of single recurrence, I have placed it here, as it is apparently most nearly related to the cases which precede and follow it.

Case XI.—Blaschko¹⁰ ("herpes digitalis"; frequent recurrence, on index).

Grouped vesicles on an inflamed base limited to right index. They are split-pea-sized and deep-seated; do not tend to rupture. If not punctured, a lymphangitis extending up the arm with axillary adenopathy results. They are preceded by itching, burning, and neuralgia of the affected finger and back of hand. Condition had existed two years, at first with intervals of three or four months, but later of six or eight weeks. Vesicles varied in number from two to fifteen. Attacks average two weeks in duration. No scarring.

The three cases just quoted have much in common. The next

departs from their type, but like them was limited to the upper extremities.

Case XII.—Bayet¹¹ (*several recurrences on hands and wrist; lesions bullous and later gangrenous, at first bilateral; hysteria*).

Hysterical girl, aged eighteen. Bullous eruption, both hands, healing in a month; no precursory pains. Five months later pain and formication in right arm and forearm, followed in five hours by bullæ on dorsum of right hand. These gave way to superficial ulcerations with brown, dry, hard crusts, often becoming greenish. The gangrene did not extend much below the papillary body. Nerve trunks tender. Dorsal surface of hand, entire forearm and arm, except deltoid region, presented a painful tactile and thermic anæsthesia. The palm preserves the tactile sense, but is insensible to pain. Paresis of extensors of hand. Twelve days later new patch on anterior surface of wrist.

This case presents three points of resemblance to Kaposi's well-known cases, viz., hysteria, recurrence, gangrene.

Case XIII.—Weiss, quoted by Crocker¹² (*frequent recurrences over median tract, bilateral; bullous; motor, trophic, and secretory disturbances*).

Symmetrical zoster affecting branches of the median, recurring at intervals, and producing trophic disturbances of the skin and nails supplied by the median nerve, and thumb clonus. The eruption was bullous and accompanied by dysidrosis and followed emotional disturbances.

Case XIV.—Tilbury Fox¹³ (*several recurrences at trunk, gluteals, and penis*).

Man, aged thirty-three. Every June, for three successive years, there appeared a band of vesicles passing from front to back over the point of the right shoulder, with herpes of the gluteals and penis.

The occurrence of lesions on the right gluteals in this case constitutes a point of resemblance to the next three cases in which the lumbar and sacral regions were involved.

Case XV.—Von Düring¹⁴ (*frequent recurrences; femoral, alternating occasionally with herpes of penis*).

Man, aged twenty-three. An attack of erysipelas (?) and four attacks of "pseudo-erysipelas" were followed by herpes, which recurred at intervals of six weeks for six years, and at the date of report still continued. The patch, hand-sized or smaller, was below the left trochanter. Sometimes preputial herpes seemed to take the place of the femoral attack.

Case XVI.—Hartzell¹⁵ (*frequent recurrences; femoral and sacral, occasionally bilateral*).

Man, aged forty-five. First attack on inner and upper part of right thigh. Three weeks later, over sacrum. Continued to occur at intervals of three weeks or four for a year or more. On several occasions, and when on sacrum, was bilateral. There were two more recurrences after intervals of one and two and a half years.

This case may not be thought to belong to the subgroup of recurrences at the *same* site, but that the eruption was here really confined to one nervous area is evident when we remember that the skin over the sacrum is supplied by the posterior branches of the three upper sacral nerves, while their three anterior branches go to form the sacral plexus, of which the small sciatic, with its cutaneous twigs, supplying in part the upper inner aspect of the thigh, is a branch.

Case XVII.—Bertholle¹⁸ (*frequent recurrences with marked neuropathic complications; herpes labialis and præputialis*).

Man, aged forty-eight, himself a physician. In early life he frequently had herpes labialis, but on reaching the age of twenty the site of eruption changed and he had frequently recurring herpes præputialis. At thirty, vesicles on the nates with neuralgia of inferior extremities. From thirty to thirty-five, herpes was less frequent on prepuce, but more so on the nates. At the same time appeared attacks of nocturnal asthma, alternating with sharp pains in one shoulder, shooting toward the scapula. At thirty-five appeared hemicrania with a neuralgic affection of the bladder. From this time his headaches came on about every two months, and were invariably followed by herpes of the nates. They were accompanied by a regular cycle of nervous phenomena terminating with the herpes as with a crisis, and always occupying one week. At the date of the report the attacks had become more frequent, there having been eight in seven months. The number of patches varied from one to six. The headache was always on the right side and the pain on the left, corresponding to the decussation of fibers at the medulla.

This case suggested to Bertholle the introduction of a new clinical term, "*herpès récidivant de la peau*." This is included in Bazin's "*herpès successif chronique de la peau*," which Besnier and Doyon¹⁹ described as an eruption which may occur on any point of the skin. The sites of election are the cheeks, chin, *alæ nasi*, ears, buttocks, internal aspect of thigh, and palm. It is almost always solitary, sometimes abortive, often neuralgic, irritative, and painful. There may be adenopathy. Frequently relapses and reappears at the same points.

Bertholle's case and those of von Düring and Tilbury Fox just cited, as well as Elliot's, to be mentioned later, point to the relations existing between recurrent zosteroids and h. præputialis, the connect-

ing link being furnished by Mauriac's "herpès névralgique des organes génitaux" ¹⁸ (*herpès génital récidivant zostéroïde ; herpès progénital, type Diday et Doyon*). A consideration of this interesting affection and the many hints it affords would be most instructive in this connection, but would lead us too far.

The next six cases presented lesions limited to the face and neck. In the two following the recurrences were frequent and limited to one side :

Case XVIII.—Hitherto unpublished (*frequent recurrences limited to first two branches of fifth nerve*).

Boy, aged seven, presented himself at my clinic at the St. Louis Medical College. He was the son of the woman who furnished Case IX. Over the areas of distribution of the supratrochlear and nasal branches of the first division and of the temporo-malar and infra-orbital branches of the second division of the fifth nerve on the left side were groups of herpetic vesicles and pustules. The palpebral and ocular conjunctiva of the same side was much injected. His pulse was 112 and his temperature 102°. The vesicles had then been out three days and were preceded for two days by pain over the region involved. His mother stated that at the age of six months he had had a patch just below the orbit and that this had since recurred every five or six months, so that he had had some thirteen or fourteen recurrences in all, and all limited to the same side. It had never spread beyond the area of the infra-orbital until the attack which I witnessed.

Case XIX.—Jamieson ¹⁹ (*frequent recurrences, right cheek*).

"A lady, aged twenty-six, suffered from an eruption of vesicles in groups running transversely across the right cheek, each attack being preceded by pain. This repeated itself many times at intervals."

Case XX.—Behrend ²⁰ (*phthisical boy, several recurrences on face, once bilateral*).

Boy ; had phthisis ; mother died of same ; a sister has had zoster. Patient had had nausea, vomiting, and headache for a month when herpes appeared over the first, second, and third branches of the fifth nerve on the left side and over the first and second on the right.

Pulse 100, with no elevation of temperature. This was in January of 1887. Behrend observed two attacks before this : one, February, 1883, over the third branch of the fifth, left ; and one in November, 1884, on the ear. Patient stated that he had had several attacks before these.

This case, as well as Bertholle's (XVII) and mine (XVIII) illustrate the tendency of frequently recurring zosteroids finally to invade neighboring branches. The following also shows the same thing :

Case XXI.—Hallopeau and Barrié²¹ (*several recurrences on face, once bilateral*).

Bilateral herpes of face in groups on ear, malar region, upper eyelid, nose, upper lip, and lower lip, opposite mental foramen, on right side. The right eye is injected and presents a small ulceration of the cornea. On the left side are two small groups on the malar region and on the cheek. The eruption was preceded by intense headache, which still persists, general aching, chills, and fever. No anæsthesia. The patient has already had several crops of discrete herpes, sometimes on the lip, and again on the right ear or nose.

Case XXII.—Elliot²² (*several recurrences, bilateral, on neck*).

Man, aged thirty-nine; zoster on the left side of neck and eight days later on right side. Two months later again on left side, followed in two days by lesions on right. After a month a similar attack, and again a month later herpes on right side of penis and corona glandis.

Case XXIII.—Hardaway²³ (*frequent recurrence, bilateral, neck*). Compare Case XXII.

Old man. A patch of vesicles every few weeks on each side of neck; one side would perhaps precede the other by a day or so. The lesions were arranged just as in zoster, and the subjective symptoms were similar. This continued for years (some of these particulars are not to be found in the reference given, but were communicated orally).

The remaining cases of this subgroup, all but the last three, owned a traumatic origin. In the first two (Cases XXIV and XXV) the injury was centric, in the next (Case XXVI) it bore upon the trunk of the nerve supplying the affected area; in Case XXVII the injury was to a distant site, the causal connection being doubtful. In Case XXVIII the traumatism was peripheral, upon the site occupied later by the eruption, while the last three (Cases XXIX, XXX, and XXXI) were due, it would seem, to a continued peripheral irritation.

Case XXIV.—Kopp²⁴; blow on the head; facial zoster, left side; seventeen attacks in five years; marked scarring.

Case XXV.—Nieden²⁵ (*trauma to cervical vertebræ; frequent recurrences of ophthalmic herpes with sensory, motor, and secretory disturbances; adenopathy*).

Man, aged twenty-eight. Fracture of transverse processes of second, third, and fourth cervical vertebræ, with infiltration involving neighboring structures. Attacks of pain similar to that described below every two years. Reporter first saw patient six and a half years after injury. Had intense boring pain in left half of skull, conjunctivitis, blepharospasm and myosis resisting atropine on that side. Great tenderness on pressure of bulb in neighborhood of ciliary body. Hyper-

æsthesia of nasal and oral mucous membrane and skin of face on left side. Redness of that side, with paroxysms of perspiration twice daily, most marked on forehead and when pain was most intense. Sense of heat limited to same side. On the fourth day appeared herpes of left side of forehead, nose, and both left lids. Cornea much injected. Less pain. Next day appeared vesicles on conjunctiva and cornea and reaction to atropine returned. Nasal secretion increased. Hyperæsthesia gradually gave way to anæsthesia. Cervical and submaxillary glands swollen.

Similar but milder attack a year later. The nose this time not involved and the eyes less so. After another year a reproduction of the first attack, with unilateral ptyalism and hyperidrosis. Scarring.

The following year a mild attack; eye uninvolved. Still a year later severe headache, with ocular irritation, followed after a few days by a few vesicles on forehead, nose, and cornea. After again a year a recurrence as severe as the first or third, which left ulceration and scarring and marked anæsthesia. With each attack was noted præcordial anxiety and tachycardia. (Compare Case XX.)

Nieden thinks he can safely say that the upper cervical sympathetic ganglion was here involved.

Case XXVI.—Charcot²⁶ (*trauma to nerve trunk; several recurrences*).

Gunshot wound of thigh followed by neuralgia beginning at scar and following nerve distribution to foot. Involved area was on several occasions the site of grouped vesicles, “*tout-à-fait semblables à celles d’un herpès zoster.*”

Case XXVII.—Wilson,²⁷ puncture of right hand. Three or four weeks later blebs on left thigh, recurring frequently for a year and a half. They were preceded by feverishness and a local scalding sensation.

It may be doubted whether the trauma and herpes were more than a coincidence. This case recalls one of Verneuil’s, quoted by Leudet (*loc. cit.*), in which there was labial and guttural herpes, relapsing several times after scraping the cervix for epithelioma. The case does not seem worthy of more than this passing notice.

Case XXVIII.—Kaposi; Besnier and Doyon’s edition, vol. i, p. 450 (*several bullous recurrences, peripheral trauma*).

“A girl of twenty had had for several weeks bullous eruptions over right mamma accompanied with sharp neuralgic pains.” She had been bitten by a horse on the mamma.

Case XXIX.—Crocker (*loc. cit.*): “I have seen recurrent herpes round the sinus produced by a diseased tooth.”

Case XXX.—Pearse Gould, quoted by Crocker, *loc. cit.* Recurrent herpes about a carious rib.

Case XXXI.—Ehrmann,²⁸ bullæ over region of fifth nerve, recurring from time to time. A carious tooth on the same side. When this was removed the eruption appeared bilaterally.

Subgroup B.—Several recurrences, at varying sites.

Case XXXII.—Wallis²⁹ (*trauma ; herpes, twice bilateral*).

Woman, aged sixty-five. Four years after a fall injuring the back, had zoster over left deltoid. Thirteen months after, over sixth, seventh, and eighth intercostals, "and, as this eruption was disappearing, a fresh crop of vesicles showed itself on the outside of *both* thighs and legs." A year later had another attack over left intercostal and both scapular regions.

Case XXXIII.—Kaposi³⁰ (*pemphigus neurotico-traumaticus [hystericus]*).

Female, aged twenty-two, wounded nail-fold. In a few days blebs appeared on the dorsal surface of the middle finger, and a few days later on the dorsum of the hand and the wrist. Four weeks after the accident there existed a reddened painful patch, hand-sized, covered with blebs. Immediately afterward blebs appeared in other localities, preceded by pain in the affected part, followed in two or three hours by redness, upon which formed wheals followed by blebs, pea to egg sized.

It must be admitted that this case departs widely from the accustomed characters. In the rapidity of formation of the lesions it recalls Galton's case (VIII). Kaposi thinks that the peripheral stimulus was here transferred to the general vaso-motor system.

Cases XXXIV and XXXV.—Kaposi, in Besnier and Doyon's second edition, vol. i, p. 443.

"I know through a verbal communication from two subjects, one of them a physician, that there had occurred in their persons several recurrences of zoster, in the region of the crural and in that of the genital nerves."

The language leaves one in some doubt as to whether both regions were affected in each case.

Subgroup C.—Several recurrences at the same and again at a distant site.

Case XXXVI.—Mackenzie³¹ (doubtful).

Multiple symmetrical zoster (?), affecting the face, chest, axilla, shoulders, and thighs, accompanied with tenderness along the spine and severe neuralgia. Was to some extent recurrent.

Although I have included this case for the sake of completeness, I question whether it was in any sense a zoster.

Subgroup D.—Several recurrences ; sites not definitely stated.

Case XXXVII.—Leloir, quoted by Besnier and Doyon in their second edition of Kaposi, vol. i, p. 445.

Physician, aged sixty-three, has vitiligo. Had ten attacks of intercostal zoster.

Case XXXVIII.—Hardaway, *loc. cit.* and verbal communication. Three recurrences at long intervals in a boy.

Of the thirty cases in Group II, only one, Wallis's (XXXII), definitely shows recurrences affecting distant areas, for in Cases XXXIV and XXXV the exact distribution is not stated with sufficient clearness, in Cases XXXVII and XXXVIII it is not given at all, while it is doubtful whether Cases XXXIII and XXXVI should be at all included in the list. This leaves the twenty-three cases of Subgroup A with "frequent recurrences at the same area." Of these, thirteen were strictly limited to one site, and in seven more the corresponding region of the opposite side was affected. In Tilbury Fox's case, a distant site, the gluteals, was involved, but simultaneously. In this case, in Elliot's, and in two others, there was also præputial herpes ; preceding the zosteroid in Bertholle's case, accompanying it in Fox's, alternating with it in von Düring's, and following it in Elliot's.

We may therefore formulate the following general law :

Zosteroids of frequent recurrence remain limited to their original site or to the corresponding opposite region.

(Wallis's case presents the only definitely established exception.)

To which we may add the following : *Recurring zosteroids due to traumatism or to continuous peripheral irritation remain limited to one site.*

(*To be continued.*)

XANTHOMA DIABETICORUM, WITH REPORT OF A CASE.

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THIS rare skin disease was first reported by Addison and Gull in *Guy's Hospital Reports* in 1851. Since then Hutchinson, Bristowe, Gendre (case of Hillairet), Malcolm Morris (two cases), Besnier, Chambard (case of Hillairet), Hardaway, Barlow, Cavafy, Colcott Fox, Vidal, Crocker, Robinson, Payne, and Johnston

have published cases. This would make a total of eighteen cases (inclusive of mine) on record at the present time. Aubert related a case to Chambard that had occurred in his practice, but a description of this case has never been published.

It is noteworthy that ten out of the seventeen cases have been reported by English dermatologists. To my knowledge, no case has as yet been reported in Germany or Austria. Malcolm Morris deserves much credit for recognizing this disease as separate and distinct from, yet related to, the ordinary xanthoma. It is not probable that this affection is as rare as the above figures would seem to indicate. Glycosuria exists unsuspected in many cases. As soon as the general practitioner is able to recognize the clinical features of this disease, the number of reported cases will multiply. In quite a number of the cases published the glycosuric condition was only discovered after the character of the eruption had given the clew.

Xanthoma diabeticorum may be described as a subacute inflammatory affection of the skin, associated with glycosuria, and characterized by an eruption of discrete or confluent, firm, dull-red, pinhead to pea sized papules, with often yellowish summits, coming on rather rapidly, and disappearing as the constitutional condition improves. The yellowish "heads" give the lesions a pustular appearance, but upon incision they are found to be solid. This condition is not uniformly present. Dilated capillaries are often observed over the papules, and produce a hazy redness which tends to obscure their yellow color.

Itching, prickling, or tenderness is usually experienced in the lesions. From a perusal of the cases reported, it would seem that tenderness on pressure is the most constant subjective symptom.

Ætiology.—The disease is nearly always associated with glycosuria. In one case it antedated the appearance of sugar in the urine. It has, however, been absent in a few of the cases. It would seem that the eruption and the glycosuria are both symptoms of an altered hepatic metabolism, and that the one may exist without, of necessity, the other. With but two exceptions the patients have been males, their ages varying from twenty-six to forty-eight. They have nearly all been corpulent and most of them in apparently excellent health.

Prognosis.—The prognosis is favorable. The disease has in some cases evinced a marked tendency to recurrence. Besnier reports a case in which for five consecutive years the eruption made its appearance in the month of July and disappeared in November. Robinson's case also recurred. The French have, therefore, called the disease, the transitory remittent or intermittent xanthoma of diabetics. The last two terms are inaccurate, as the majority of cases do not recur. The

disease tends to rapid involution and may disappear in a few weeks, although the average convalescence requires, perhaps, several months.

Diagnosis.—The diagnosis is, as a rule, easy. If diabetes is known to exist, of course the matter is still simpler. The eruption has a markedly neoplastic appearance. Xanthoma diabeticorum is distinguished from ordinary xanthoma by the following characteristics:

1. The rapid evolution and involution of the eruption.

In ordinary xanthoma, the evolution is slow and involution seldom occurs, the lesions usually persisting.

2. Firmness and hardness of the papules.

3. Absence of patches or striæ.

4. Difference in color. Often a distinct reddish tinge, with sometimes yellow apices.

5. Subjective symptoms. Itching, tingling, or tenderness present in xanthoma diabeticorum absent in ordinary xanthoma.

6. Localization. Seats of predilection upon elbows, knees, loins, and buttocks. In ordinary xanthoma the region *par excellence* involved is the upper eyelid.

7. Hair follicles involved.

8. Existence of glycosuria.

The *histological pathology* of the subject has been carefully studied by Morris and Clarke, Crocker and Robinson.

It is pretty generally accepted that xanthoma diabeticorum is an inflammatory affection. Its evolution and involution point indubitably toward this. Large endothelial and giant cells are seen in chronic inflammations, and the fatty degeneration which occurs has its analogue in atheroma of arteries.

As far as the ordinary xanthoma is concerned, this is by no means an established fact. Touton strongly advocates the neoplastic character of xanthoma; others believe it to be inflammatory. There is overgrowth of connective tissue with the formation of groups of large epithelioid fatty cells probably derived from the connective-tissue corpuscles. The rete mucosum contains pigment. Crocker says, "The diseased process in xanthoma diabeticorum appears to be anatomically of the same nature as in ordinary xanthoma, but with more inflammatory phenomena and less connective-tissue growth." Xanthoma cells are found in both forms, but in the diabetic variety to a lesser extent.

In a joint article written by Malcolm Morris and Jackson Clarke, the latter quotes Pye-Smith as saying that "xanthelasma is essentially a chronic, deep dermatitis with early fatty degeneration, the yellowish color depending upon the presence of innumerable fatty granules in the tissues. In the nodules there is also present a dense fibrous tissue,

and even in the plane variety a few ill-formed cells have been discovered. The minute structure of xanthelasma is identical with that of atheroma of an artery." Clarke adds that in suitably prepared sections of atheroma the same large "xanthoma cells" are found.

Bacteriological examinations have all been negative.

According to my knowledge, the following is the first case of xanthoma diabeticorum observed in Philadelphia and the third in America:

C. K., aged thirty-four, saloon proprietor, native of Germany. Father died of traumatic myelitis at the age of fifty-three; mother, of unknown cause, at the age of seventy-two. Patient has had measles, varicella, etc., but has since adolescence enjoyed unusual health. Has been a moderate consumer of alcohol and tobacco. Was accepted by a life-insurance company in June, 1893, as a particularly good risk. Stature, five feet five inches. Weight, one hundred and eighty pounds. Two years ago the patient weighed two hundred and eight pounds, but has gradually come down to his present weight. The patient in September, 1893, consulted Dr. Jurist, through whose kindness I have been enabled to see and report the case. At this time the patient was feeling very well, and merely saw his physician because of his skin affection. The character of the eruption, however, at once directed attention to the urine, the examination of which, with the ordinary tests, showed an abundance of glucose. A very small amount of albumin was also present, but no casts. Upon close interrogation the following facts were elicited: The patient's thirst was a little more marked than usual, and the amount of urine voided greater. An accurate observation of the amount passed in twenty-four hours showed it to be sixty-four ounces. Appetite normal. No appreciable loss of strength.

Six weeks after the onset of the skin manifestations, the eruption presented the following characteristics: The lesions were pinhead to pea sized, obtusely conical, discrete papules of a dull-red to a yellowish-red color, of dense consistence, sharply defined, and elevated above the skin about one sixteenth of an inch. Upon pressure the redness disappeared and the lesions became distinctly yellow. By the aid of a magnifying glass, and in some lesions without, small dilated capillaries were visible. There were no pustular-looking summits, as has been observed in some cases. The whole lesion was of uniform color. The eruption began upon the elbows, then developed rapidly upon the forearm, lumbar and gluteal regions, axillary folds, and neck respectively (see cut). There were approximately seven hundred papules distributed as stated below: About twenty lesions upon the flexor surfaces of the left arm, double that number upon the extensor surface of the left fore-

arm, about one dozen upon the flexor surface of right forearm, and a similar number upon the posterior aspect of the neck. The front of the neck showed about a half dozen lesions. Numerous papules studded scabies-fashion about the anterior and posterior axillary folds. The loins were the seat of a large number of symmetrically arranged lesions, as will be seen in the accompanying cut. Innumerable pin-



FIG. 1.—Xanthoma diabeticorum.

head papules upon the buttocks and upper anterior aspect of thighs. There were no lesions upon the knees or legs. Two or three typical papules were seated upon the dorsal surface of the left hand, and one upon the palmar aspect over the metacarpo-phalangeal articulation of the thumb. The face and mucous membranes were free. There was one patch upon the elbow which consisted of several coalesced papules.

It was three eighths by a quarter of an inch in diameter, with an irregular surface, and elevated almost an eighth of an inch above the level of the skin.

The only subjective symptom present was tenderness, especially marked when the patient rested his arm upon a hard surface. During involution there was slight evanescent itching.

The patient was placed upon an anti-diabetic regimen, and jambul and codeine given. The lesions, which up to this time had been spreading from day to day, were immediately held in check. Not one new papule developed after the institution of the above treatment. In one month such a marked change had taken place that the large coalesced plaque upon the elbow was barely perceptible to the finger passed over it. The lesions later became flatter and some of them brownish red or even purpuric in color.

Only in this stage could an error of diagnosis have been made, and the disease perhaps confounded with lichen planus. The similarity, however, between these two affections was by no means marked. Later still the lesions became dirty yellow, due to the disappearance of the capillary injection. Now scarcely a trace of the eruption remains.

The urine was carefully examined from time to time and the percentage of glucose calculated. One week after the institution of treatment (at which time the eruption began to show distinct retrogressive changes) the sugar was reduced to two per cent. About five weeks later an indiscretion in the diet sent the sugar up to 3.2 per cent. At this time the lesions remained stationary for about a week. Albumin was present upon each examination, but careful search failed to reveal the presence of casts.

Microscopic Examination.—A well-marked papule was excised at the acme of the eruption. Owing to the fact that this was hardened in alcohol, no fat could be detected later, either in the cells or the interfascicular structures. There was visible under low power a dense but sharply circumscribed cell infiltration involving the papillary bodies and extending deep into the corium. While a large number of these cells were leucocytes, there were also very many connective-tissue cells, spindle or fusiform cells that took the stain (hæmatoxylin) but poorly. The papillary vessels in the vicinity of the infiltration were dilated and the cell walls showed signs of proliferation. A few large endothelial cells were seen lying loose in the lumina of these vessels. Scattered here and there were groups of large epithelioid cells, many of them multinucleated. These are the so-called xanthomic giant cells. They were not present in all the sections, but are quite distinctly shown

in the accompanying cut (Fig. 2). Quite a number of them are grouped about an area just beginning to undergo retrogressive changes. Some of the sweat glands show marked cell infiltration, many of the acini being completely obliterated. A few of the sudoriferous ducts are

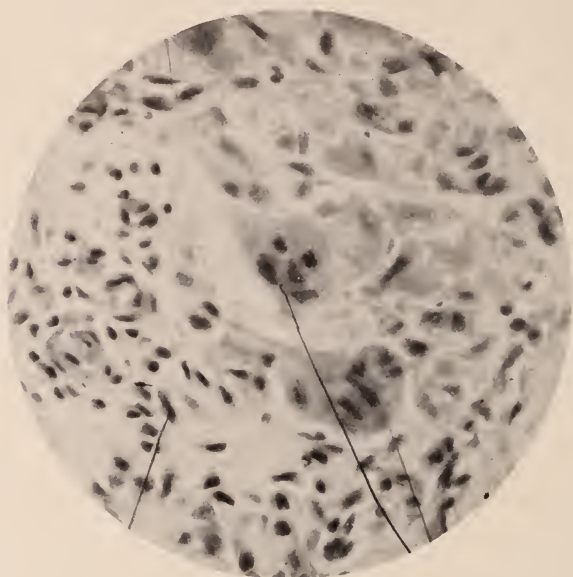


FIG. 2.—The line on the left points to cells derived from the connective tissue corpuscles. Those on the right to the so-called "xanthoma giant cells." Zeiss, DD. $\times 500$.

surrounded by round cells. The papule was in the immediate vicinity of a hair follicle whose root sheaths did not escape the general cell invasion.

I wish here to express my cordial thanks to Dr. Milton B. Hartzell for his kindness in photographing the microscopic preparation.

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PAGET'S DISEASE.

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E M., female, fifty-two years of age, single. About two years and a half ago the patient was troubled with an itching which affected all parts of the body. She remembers that she was

sometimes obliged to scratch the right nipple, and thinks that she may have torn the skin with her nail. At all events, from that time the nipple began to be sore. Since its inception the disease has gradually spread. The skin has been raw almost from the beginning. The affected surface is tender, but it has never given rise to severe darting or lancinating pain. There is no glandular involvement in the corresponding axilla. The general health is unimpaired and she has lost little if any flesh. Perhaps she may have lost a little strength, but the decline is not marked. Her appearance is that of a well-nourished woman. With the exception of possible irritation by scratching, there has been no injury to the breast or nipple, but she has been told that when a week-old babe she suffered from inflammation of the breast, which suppurated.

Present Appearance.—The nipple is so depressed as to be scarcely distinguishable, is of a vivid red color, and surrounded by a zone of the same hue. The surface is covered with a sanguinolent fluid mixed with a little pus. The inflammatory areola is about the size of a silver



Paget's Disease.

dollar. Its base is somewhat hard and its border is sharply defined. (See illustration.)

This case is an excellent example of an affection which is of particular interest from a diagnostic and ætiological point of view. Paget's

disease requires to be differentiated on the one hand from chronic eczema, and on the other is thought to be related to certain other affections of the skin and mucous membrane. Prior to the paper of Sir James Paget, in 1874, the disease which has since been known by his name had generally been confounded with eczema and sometimes with psoriasis. Its points of distinction from the former malady will hereafter be indicated.

Paget's disease is one of the rarer affections of the nipple. It usually begins as a slight fissure or as an exfoliation of small horny scales. After the crusts have detached themselves a reddened surface is perceived. The advent of the disease is ordinarily accompanied by itching, which, as a rule, disappears in the subsequent course. The process gradually invades the entire nipple and extends to the areola. The affected surface is of a bright red color, smooth or somewhat roughened by the presence of fine granulations. It is covered by a moderately free secretion which often dries into yellowish or brownish crusts. Beneath the ulcer a certain amount of induration can usually be detected. The raw surface readily bleeds. The term *eczematiform stage* has been applied to the period thus briefly described. The progress of the affection is very slow. In course of time the nipple becomes retracted and gradually disappears. The spot formerly occupied by the nipple may become depressed or ulcerated. Finally, the disease involves the mammary gland, which becomes swollen and undergoes malignant degeneration. Paget's disease attacks the right more often than the left nipple. Its duration varies in different cases. On an average the affection becomes epitheliomatous in from two to six years. Though most frequent upon the nipple, it may occur in other localities. Dr. Radcliffe Crocker has described a case in which the scrotum and penis were affected, and the diseased area, after having proved rebellious to more conservative methods, was at length excised. Sections demonstrated that the process had attained the epitheliomatous stage. A similar case has been reported from the clinic of Professor Pick, of Prague. A patient had been under treatment for eczema of the glans penis, with a tendency to the proliferation of epithelium and the formation of tubercles. After an operation for phimosis the eczema improved, but it subsequently returned and new growths the size of peas formed upon the glans and frenulum. The tumors were removed and the microscopical examination revealed a typical picture of carcinomatous growth, together with a small-celled infiltration expressive of eczema. These occurrences in males are, however, altogether exceptional.

Paget's disease may be distinguished from chronic eczema by a num-

ber of considerations. The course of an eczema may, indeed, be very tardy, but it usually exhibits periods of temporary or comparative subsidence alternating with acute exacerbation. Eczema of the nipple is often if not generally associated with manifestations of the same disease upon other portions of the body. The lesions may not be coexistent, but a history of other eczematous outbreaks can usually be obtained. The margins of an eczematous patch are not abrupt, but shade gradually into the surrounding unaffected integument. There is infiltration in eczema, and it may be deep, but it is not always present to the same degree; at times much of the thickening and hardness is removed by absorption. Itching is a prominent subjective symptom of eczema. The nipple may be the seat of eczema at almost any age of life, but this localization is particularly apt to occur in nursing women. Eczema is not prone to undergo malignant change.

All the features just indicated as characteristic of eczema are in contrast with the manifestations of Paget's disease. The latter is of slow evolution, and considerable periods of time may elapse during which little or no progress can be detected, but a decided retrogression of the lesion do not take place. The condition may not become aggravated, but neither will it improve. It is a solitary lesion, and will not simultaneously involve different regions of the body. The periphery of Paget's disease is sharply cut. There is no gradual fading from morbid to healthy tissue. The infiltration beneath the lesion is not always as thick as that of eczema, but it is persistent, and has a peculiar feel which has been likened to that of parchment. Itching is not a distinctive symptom of Paget's disease. It may be present in the beginning of a case, and may, in fact, be very distressing, but it generally subsides in the further evolution of the malady. Paget's disease rarely occurs before the fortieth year. It will not, as a rule, develop until or after the menopause. Retraction of the nipple is common in Paget's disease, but rare in eczema. The vivid and uniform color of the lesion is characteristic of the former affection. The surface, in that malady, is also apt to exhibit a somewhat papillomatous appearance which is not observed in eczema. Finally, if followed to its termination, Paget's disease is transformed into mammary cancer.

The case which forms the basis of the present paper corresponds point to point with the foregoing portraiture of Paget's disease. The patient is fifty-two years of age, and it is the right nipple which is attacked. The outbreak of the disorder was preceded by itching, and it is possible that a tear of the nipple by the finger-nail afforded an avenue of entrance to the specific germ of the disease. On the contrary, it is possible that the disease had been in existence for some time

before it attracted the attention of the patient. Though the surface early became raw, the extension has been slow, and at the end of thirty months only the nipple and its areola are involved. The nipple is greatly retracted and the surrounding zone of disease corresponds exactly to the areola. In other words, the margin is sharply defined. A hardness, sufficiently distinct but of not much depth, underlies the ulcer. The color is uniform and intensely red. Bleeding is readily produced. The disease is still in the eczematiform stage. There is no swelling of the breast. Its tubules are not thickened. The axillary glands are not enlarged.

While to naked-eye inspection Paget's disease seems to resemble eczema more closely than any other affection, the investigations of the past few years have suggested a closer relationship to several dermatoses which are apparently quite distinct. In 1889, M. Darier, of Paris, announced that, by a microscopical examination of scales taken from a case of Paget's disease, he had detected the presence of psorosperms, or coccidia, one of the classes into which the protozoa—the lowest forms of animal life—are divided. The organisms are generally found in the lower strata of the epiderm, the ducts of the cutaneous and mammary glands, and the sheaths of the hair follicles. Coccidia are unicellular organisms, roundish or elongated in form, composed of granular protoplasm, and contain one or more well-developed nuclei. They inhabit epithelial cells, in the interior of which they form primary cysts. The cysts become filled with spores, burst and discharge the spores, which form the origin of new coccidia. The wall of the cyst has a double contour, from which the protoplasm is in places retracted, but is attached to the enveloping membrane in raylike prolongations. It is difficult to bring out these bodies by staining, but they may usually be detected by a power of four hundred to five hundred diameters. Several nucleated bodies may exist within one cyst wall.

If we are able to accept this demonstration as conclusive, not only must Paget's disease be included in the category of animal parasitic affections, but it must be regarded as closely related to other maladies in which the same organism occurs, presumably as an exciting cause.

Molluscum epitheliale, or molluscum contagiosum, is a rare disorder, which principally attacks children, and which, to the ordinary methods of observation, bears no likeness to Paget's disease of the nipple. In molluscum, numerous lesions, in different stages of development, are usually present upon the body. The face is the site of election, but other regions may be invaded. The lesions of molluscum epitheliale

are rounded or pedunculated in form, and vary in size from a pinhead to a pea. Their color may be normal, pinkish, waxy, or glistening, the last giving rise to an appearance which has been aptly compared to pearl shirt buttons. The contents of the tumors are white and semi-fluid. They develop slowly, and are unattended, as a rule, by subjective symptoms. *Molluscum contagiosum* is so named because it not infrequently attacks simultaneously several members of the same family. Attempts at experimental inoculation have succeeded in at least three instances.

The picture of *molluscum epitheliale*, consequently, is altogether different from that of Paget's disease, and purely clinical observation would never compare the two maladies. Yet in sections of the tumor of *molluscum* Darier and Neisser have found bodies which they look upon as coccidia. The latter author regards the *molluscum corpuscle* as a completely cornified epithelial cell occupied by the parasite, thinks that the disease is a form of epithelioma, and that it is better named *epithelioma contagiosum*.

In treating of the clinical history of Paget's disease it was stated that, in its ultimate progress, it is transformed into or originates cancer of the breast or other surface upon which it may be seated. Notwithstanding the decided difference in its gross appearance, *molluscum epitheliale*, as regards its minute pathological anatomy, has been considered of epitheliomatous nature. In both disorders bodies believed by high authority to be coccidia have been found. These statements are, to say the least, suggestive, and it is to be hoped that the same line of investigation will be pursued until the identity of the organisms present in the two diseases shall be conclusively demonstrated or definitively disproved.

Research has, moreover, proceeded a step further in the same direction. The histo-pathology of carcinoma has been closely studied. The gross features of the disease are familiar to the practical surgeon. The details of its structure are well known to the microscopist. Once the carcinomatous process is started, we are able to follow each step of its evolution. We are still in doubt, however, as to the nature of its exciting cause. Cancer undoubtedly presents an analogy to the type of an infection. Efforts have been made, accordingly, by a number of observers, to discover a micro-organism which should be looked upon as its exciting cause. Many of these attempts have proved signal failures, but the studies of Darier, Albarran, and others have lent new interest to the subject. For the same psorosperms, or coccidia, which have been briefly described in this paper as being probably related ætiologically to Paget's disease and to *molluscum epitheliale* have

been observed in carcinoma. As early as 1885 they were found by Albarran in a case of cancer of the jaw, and were identified by Malassez and Balbiani, expert authorities upon the lowest forms of animal and vegetable life. This discovery remained unpublished, but the psorosperms subsequently found by Darier were recognized by Malassez as identical with those previously obtained by Albarran. Since that time they have been met with by other observers in cases of carcinoma. Cornil has detected psorosperms in a section of cancer of the womb. Thoma, of Dorpat, found the same organisms in a mammary cancer which had not been preceded by Paget's disease. Wickham, who has also studied the subject, encountered coccidia in an epithelioma of the nose, and in two cases of epithelioma of the bladder the same bodies were seen by Albarran.

The list of diseases in which psorosperms or coccidia are present is not yet, however, complete. Darier and Thibault have described a rare affection to which, on account of containing these organisms, they have given the name of vegetating follicular psorospermosis. This disease invades a considerable extent of surface. Its lesions begin as small papules, normal or nearly normal in color, which enlarge, acquire a hemispherical or flattened form, and become covered with a firmly adherent grayish or blackish crust. The crust hardens, and is lodged in an infundibuliform depression, which corresponds to the dilated orifice of a hair follicle. A further development converts the lesions into prominent papillomatous growths. Adjacent growths may coalesce and cover a considerable surface with a sprouting mass, covered with cornified or thick and fatty concretions. From the craterlike depression sebaceous matter, either pure or mixed with pus, may sometimes be expressed. This malady is characterized by a strong and peculiar odor. According to the writers to whom we owe the portraiture of vegetating follicular psorospermosis, it was formerly confounded with what is termed by French writers *acne keratosa*, or *acné cornée*, in which the sebaceous secretion undergoes cornification, with the follicular keratosis or ichthyosis of J. C. White, and with generalized molluscum epitheliale. The last-mentioned resemblance is of particular significance.

One more affection remains which is probably related to those which have been already sketched. This was first described in a communication made to the Tenth International Congress by Albarran, who gave it the name of vesical psorospermosis. This disease is marked by proliferation of the epithelium of the bladder. The connective tissue of the organ likewise becomes involved, and the mucous membrane is thrown up in the form of papillary excrescences. The

epithelial cylinders contained psorosperms in the two principal forms of roundish cells and spore-filled cysts.

The study of the relation of microscopic and unicellular animal parasites to several affections which, although having points of contact or resemblance, possess also marked divergences, has led to the proposed formation of a group to be known as psorospermoses. The psorospermoses include Paget's disease, molluscum epitheliale, vegetating follicular psorospermiosis, vesical psorospermiosis, and perhaps certain forms of superficial epithelioma. The whole question, however, is to be regarded as still *sub judice*, especially as relates to carcinoma. It is only fair to add that the bodies figured by Darier are not universally accepted as coccidia but are by some authors thought to be simply degenerated or cornified epithelial cells.

Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

240TH REGULAR MEETING, HELD ON TUESDAY EVENING, JANUARY 22, 1895.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Iodoform Dermatitis.—Presented by DR. JOHN A. FORDYCE.

The patient was a young man who about a fortnight ago received a contusion of the finger to which iodoform was applied. Two or three days afterward a vesicular and bullous eruption appeared on the hand, followed by considerable swelling and exfoliation of the epidermis, leaving a raw, glistening surface. The eruption gradually spread over the face as well as the opposite hand, to which no iodoform had been applied, and to the scrotum and feet. The patient stated that about a year ago he had a similar experience following the application of iodoform to the hand, which lasted for two months and did not extend to other parts of the body. Very little pain or pruritis have been present.

DR. DANIEL LEWIS said he had observed similar eruptions produced by iodoform. In one case coming under his observation the application of balsam-of-Peru ointment, fifteen per cent, produced a severe vesicular eruption. The application was made several times, and the same effect followed, showing that it was a true drug eruption.

DR. ALLEN said he had seen cases where iodoform, locally applied, produced a localized eruption, and more rarely a generalized eruption, as though the drug had been taken internally or absorbed. In a case recently under his observation the application of iodoform to a bubo produced first a local and then a general eruption. A second application of the drug produced a similar effect. In another case, a woman with syphilis, small doses of potas-

sium iodide were given internally; she was also painted with tincture of iodine in the region of the parotid gland, and iodoform was applied to a slight contusion on the forehead. Soon afterward she developed a bullous eruption, with some oedema of the eyelids and face. In that case he was uncertain whether the eruption was produced by the potassium iodide, or the tincture of iodine, or the iodoform, or by all three combined.

DR. S. LUSTGARTEN said he had seen a number of cases in which an eruption was produced by the application of iodoform. One of these was a surgeon, who was compelled to give up operating because of this idiosyncrasy, as he was subject to a constantly recurring iodoform dermatitis.

DR. MORROW stated that he had observed two cases very similar to the one presented by Dr. Fordyce. In one of these the application of iodoform to a scalp wound promptly resulted in iodoform poisoning, which manifested itself on the face and hands. The exfoliation of the epidermis, however, was not so marked as in this case. In the other case the eruption was bullous in character.

One of the chief points of interest in connection with these cases is that the eruption manifests itself on parts remote from the seat of application, and the question arises whether it is due to direct transference of the drug or to absorption. His own impression is that the latter theory is correct. In some persons it requires only an infinitesimal part of the drug to produce poisonous effects. He was interested in the case mentioned by Dr. Lewis, as poisoning resulting from the local application of balsam of Peru is of rare occurrence.

DR. JACKSON said that in one case coming under his observation the application of tincture of iodine produced a very extensive vesicular and bullous eruption over a large part of the body.

DR. ALEXANDER said he had seen a number of cases of papular or pustular eruption produced by iodoform, and he had noticed that its favorite location was in the region of the scrotum or in the softer parts, where absorption very readily takes place. To illustrate how rarely iodoform poisoning occurs, the speaker said that not a single case has been reported in the general surgical section of Bellevue Hospital since October 1, 1894. In a case seen only a few days ago the application of iodoform to a wound on the finger produced a severe pustular eruption on the hand and fingers with considerable swelling. This patient, it was found, was suffering from glycosuria without polyuria. The urine contained about two per cent of sugar, which has disappeared under diabetic diet.

DR. MORROW said the persistence of the eruption in this case is probably due to the fact that absorption of the drug is still going on. At present a slight amount of iodoform can still be detected in the wound on the finger. Usually these eruptions disappear promptly after the withdrawal of the drug; it is extremely rare to see them persist for over two weeks, as it has in this case.

DR. KLOTZ said he had seen a number of cases of iodoform poisoning where the eruption appeared on parts contiguous to the point where the application was made.

DR. FORDYCE suggested that if the eruption was due to absorption it would be more generalized.

DR. MORROW said that in cases of drug eruption which are undoubtedly due to absorption there is a predilection for certain localities. The mere fact

that an eruption is confined to certain regions does not militate against the theory that it is due to absorption.

DR. LUSTGARTEN said he was rather inclined to accept the view that the eruption in these cases is due to absorption of the drug. It seems hardly probable that in this case all the affected parts were directly exposed to iodoform.

DR. ALLEN said he saw one case where an extensive localized eruption was produced by the application of iodoform in a patient who could take any quantity of potassium iodide.

An Unusual Case of Favus.—Presented by DR. LUSTGARTEN.

The patient was a young man who first came under treatment in July, 1893, for an attack of favus of the body. From this he apparently recovered, and the patient was lost sight of until a few days ago, when he returned with extensive favus lesions on the lower extremities (see cut). The upper extremities are not affected, and he has not now nor has he ever had any favus of the scalp.

DR. FORDYCE said he had never before seen such an extensive case of favus and without any lesions on the scalp.

DR. ALLEN regarded this as the most remarkable case of favus he had ever seen. He referred to the fact that it is extremely difficult to cure favus of the scalp, while on the body it is comparatively easy.

DR. WEISSE stated that thirty years ago, or thereabouts, a case of favus in this country was regarded as a rarity. In his experience he had only seen two cases of the disease in American-born, country-bred people.

DR. MORROW said the exemption of the scalp in this case was a remarkable feature. In all cases of favus coming under his observation where the development of the lesions was luxuriant, the patients were natives of either Poland or southern Europe, and he expressed the opinion that there must be some peculiarity of the skin of these people to account for it. It is possible that it may be due to their habits or to some inherited tendency.

DR. KLOTZ referred to the fact that different species of favus had been described by certain writers; possibly the favus in the present case was of a particular kind which does not grow on the scalp. Several years ago he had seen a case where the lesions were confined to the arm; they had developed after a fall on the elbow on the spot which had been struck. The disease was discovered before it had time to spread over the body or to the scalp.

DR. MORROW said that he had also observed three cases where the lesions were confined to the body, but all of them were of very recent origin.

DR. LUSTGARTEN said that this patient, after his first attack of favus, was probably not entirely cured, and neglected his treatment. It is an admitted fact that with age the tendency to contract favus greatly diminishes. In Hungary and Austria the disease is very common, while among native-born Americans it is extremely rare.

DR. KLOTZ said it was comparatively rare to find several cases of the disease in the same family; with ringworm, on the contrary, it was very common to see an entire family affected.

DR. ROBINSON said he had at present under his care three cases of favus in the same family.

DR. ALLEN referred to a case of favus in an Irish woman, three of whose children (American born) contracted the disease.



Favus of the body.

DR. LUSTGARTEN said that the laws to prevent the admittance of persons with contagious diseases into this country are not carried out with sufficient stringency. Patients suffering from favus are permitted to land on the testimonial of a doctor that he will take care of them. This, however, will not prevent the disease from spreading.

DR. MORROW said that the influence of climate is probably a very potent factor in the propagation of these parasitic skin diseases. It is a well-known fact that ringworm is not nearly so common here as in England, where the climate is moister. In certain parts of Mexico ringworm develops to a remarkable degree: instead of being confined to comparatively small patches, it extends in enormous rings about the limbs and body. Such cases are also seen among the inhabitants of the Sandwich Islands, where vegetable parasites of all kinds as well as vegetation itself flourishes much more luxuriantly than in our climate. It is also a fact that certain parasitic diseases exist in those countries which are comparatively unknown to us.

DR. LUSTGARTEN said that the area in which the occurrence of favus is comparatively common is widespread: the disease is met with in northern Italy and southern France; in Russia, Poland, Austria, and Hungary. A sufficient explanation for its occurrence may probably be found in the fact that most of these people are uncleanly in their habits, and their manner of living is such as to favor the spread of the disease.

A Case of Dermatitis Papillaris Capillitii.—Presented by DR. MORROW.

This patient had a lesion on the back of the neck which had improved somewhat under the use of salicylic acid and mercurial plasters. He had in addition some peculiar lentiginous patches on the body and also numerous fibromata. These were mostly subcutaneous. He stated that all these lesions, with the exception of the one on the neck, have existed since his very early childhood, if not from birth.

DR. MORROW said he first saw this patient when resuming duty at the hospital on October 1, 1894. A diagnosis of syphilis had been made by his assistant on the strength of certain cicatrices on the arms. Personally he was inclined to eliminate syphilis, and he had made a diagnosis of dermatitis papillaris capillitii.

DR. ROBINSON said he agreed with Dr. Morrow's diagnosis.

DR. ALLEN stated that he also thought the case was one of dermatitis papillaris capillitii, although the scars on the arms resembled those of syphilis.

DR. JACKSON made the same diagnosis. He referred to a similar case which he saw with Dr. Fox; in that case the patient afterward went to Vienna, and Kaposi confirmed the diagnosis.

DR. LUSTGARTEN said that a section of the lesion on the back of this patient's neck had been submitted to him for examination. The microscope showed considerable infiltration involving almost the entire derma; it is more or less hyperplastic, and fills especially the follicles and vessels. This condition is more marked in the upper layers of the skin.

The speaker said that during the past eight or nine years about seven cases of molluscum fibrosum have come under his observation, and in all these there was an absence of the thyroid gland, so far as palpation showed. In Dr. Morrow's case the thyroid could not be felt. As the ætiology of molluscum fibrosum is unknown, he thought it possible that the disease might have

some connection with the absence of the thyroid body ; in one case, however, in which he employed thyroid feeding the result was negative.

DR. MORROW said that while he would give the thyroid extract a trial in this case, he had very little confidence in its efficacy. In several cases of acromegaly treated with this remedy he had noticed little if any improvement.

A Case for Diagnosis.—Presented by DR. KLOTZ.

The patient was a boy with an eruption on the face and the upper part of the body which had appeared rather suddenly about a week ago. It was attended with only slight itching, and consisted of small circumscribed, round and oval, slightly scaling patches of irregular distribution.

DR. ALLEN said he regarded the case as one of herpes tonsurans maculosus, of rapid development. A number of such cases, in young adults, had recently come under his observation. The speaker said there seemed to be two forms of this disease, one probably parasitic and the other due to gastric derangement.

DR. ROBINSON said he would be unwilling to venture a positive diagnosis without examining the case by daylight. The eruption might be a parasitic dermatitis, or, more probably, it was secondary to one of the infective diseases. He did not regard the case as one of pityriasis rosea.

DR. MORROW said he did not think the eruption was of parasitic origin. The rapidity with which it became generalized would exclude the idea of such an origin. He had seen cases of eczema not unlike this, with comparatively slight itching and pale-colored papules. The speaker said he was inclined to attribute the eruption to some drug.

DR. LUSTGARTEN diagnosed the case as one of pityriasis rosea. The fact that the lesions also cover the face might be accounted for by the youth of the patient and the softness of the skin.

DR. FORDYCE said he agreed with Dr. Lustgarten.

DR. JACKSON said the eruption reminded him of two cases he saw some years ago in which the diagnosis was very uncertain. In that case one physician made a diagnosis of scrofula and another of German measles. Dr. Jackson said he did not regard Dr. Klotz's case as one of pityriasis rosea.

DR. KLOTZ said that when the patient first came to the clinic, both pityriasis rosea and a drug eruption were considered, but the case did not seem to fit in either class. The lesions are more like those of urticaria or herpes tonsurans maculosus. A number of somewhat similar cases came under his observation last spring, at the time when there was so much distress among the poor people.

DR. LUSTGARTEN referred to the relationship between herpes tonsurans maculosus and true ringworm. He stated that in the lesions of the former affection he had found some spores and a few mycelia.

DR. ALLEN stated that he also had examined the scales of herpes tonsurans maculosus and found small mycelia and spores ; they were similar to those found in ringworm, but much smaller. In one case of pityriasis rosea coming under his observation the patient had seven attacks, and it was found that four of these came on directly after New-Year's day, when the man, who generally indulged freely in alcoholic drinks, made his annual "swear off."

DR. S. SHERWELL said he did not regard pityriasis rosea as being parasitic in its origin, or else peculiarly so when favored by other conditions—as, for instance, a woman under his observation has had repeated attacks of the

disease, the eruption always appearing during the period of early lactation: and in other cases periodicity of attack had seemed to him probable. He could not believe it was distinctly a parasitic form of skin disease.

DR. ROBINSON said he had seen cases where a pityriasis rosea developed after indulgence in alcoholic drinks.

DR. MORROW said that while he did not regard Dr. Klotz's case as one of pityriasis rosea, its localization alone did not contraindicate this diagnosis. He recently saw an undoubted case of this affection in which the face was involved by the eruption.

Report of Cases presented at Previous Meetings.—DR. JACKSON stated that Dr. Morrow's case of extensive syphilide of the nose, which was presented at the last meeting, had turned up at the Vanderbilt Clinic in Dr. Fox's service. Under mercurial plaster a large portion of the lesion had disappeared.

DR. LUSTGARTEN reported that his case of melano-sarcoma of the forehead, presented several months ago, had improved greatly under the use of arsenic internally.

DR. MORROW reported that he recently saw a patient with an erythematous eruption on the upper portion of the body, which had developed several days before. The eruption was limited to that part of the body which was covered by the man's undershirt; on examining the shirt it was found that it had been colored brown, probably with bichromate of potassium. He was advised to wear a white or uncolored undershirt, and the eruption disappeared a few days after making the change.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY: STATED MEETING, HELD ON TUESDAY EVENING, APRIL 9, 1895.

DR. ALEXANDER M. STEIN *in the Chair*.

Gonorrhœa in a Boy aged Twelve Years.—DR. F. TILDEN BROWN presented a boy, aged twelve years, who had gonorrhœa which was acquired in a non-venereal way. He was allured into a cellar and masturbated by an older boy, who, it has since been learned, had a urethral discharge at the time. In the boy shown by Dr. Brown the urethral discharge contains gonococci. The patient strenuously denies all other possible sources of infection.

Urinary Tuberculosis.—DR. BROWN gave the history of three cases of urinary tuberculosis, and presented two of the patients. The first patient was a woman, aged thirty years; a domestic. Family history negative. No history of gonorrhœa, syphilis, or rheumatism. In February, 1892, she slipped and fell, striking on her back. Two months later the left sacro-iliac region became painful, and she began to suffer from frequent and painful urination. She also had frequent night sweats, and occasional nausea and vomiting. In August, 1893, the bladder irritability, which had temporarily ceased, again appeared. The urine never contained any blood. In October, 1893, she was obliged to give up her work and entered the Presbyterian Hospital. With the cystoscope a small, apparently tubercular lesion was seen

on the anterior bladder wall ; it was a superficial, slightly excoriated ulcer, with an inflammatory areola. Tubercle bacilli were found in the urine. At this time she was obliged to urinate at half-hour intervals. The bladder was treated locally by various methods, but her symptoms did not improve. She was then placed on a generous diet and tonics, and in April, 1894, she was discharged, improved. Her improvement consisted in longer urinary intervals, a slight increase in weight, and less frequent night sweats. She still had pain in the suprapubic region and over the left kidney. Since her discharge from the hospital she has lived here in the city, in a tenement house, and has been able to perform her domestic duties. She was kept under observation and given creosote, cod-liver oil, and hypophosphites. Her condition at the present time is very encouraging. She has very little pain and no night sweats. Her urine contains a good deal of pus and the *bacilli coli communis*. No tubercle bacilli have recently been found in the urine, although they probably still exist there. The speaker said he regarded the case as one of renal tuberculosis.

The second patient was a male, aged twenty-eight years ; German. He gave no history of syphilis, rheumatism, or pulmonary trouble. When he was twelve years old he had synovitis of the left knee, from which he made a good recovery. At the age of eighteen he had gonorrhœa. In July, 1892, he fell on the sidewalk, striking the left knee, and at the same time a heavy weight he was carrying fell on his sacrum. Five weeks later an abscess formed in the sacral region, for which he was treated at the hospital, and it gradually healed ; the knee still remained in bad condition. In September, 1894, the patient's left knee joint was resected by Dr. Brown for tubercular disease, and in December his left testis was removed for the same reason. A few months later, tubercle bacilli were found in the urine. Urine withdrawn from the bladder by a sterilized catheter contained tubercle bacilli. The specific gravity of the urine is 1.020 ; acid ; quite clear ; it contains neither blood nor albumin. The man has no symptoms whatever connected with his urinary apparatus. Dr. Brown said that if these tubercle bacilli, which are still to be found in the urine, come from one of the kidneys, as they probably do, it seems to indicate that we can have a renal tuberculosis going on without giving rise to any urinary symptoms.

The third case reported was that of a man, aged twenty-six years ; a plumber by occupation. When he was first seen, in February, 1894, he complained of frequency of micturition. There was no venereal, rheumatic, or tubercular history. The frequency continued, and in November, 1894, there was some blood in the urine, and at the end of the act of micturition he felt a stinging pain in the glans penis. The urine was slightly turbid ; it contained a small amount of albumin and some tubercle bacilli. These were found at several different examinations. Seven months later the man returned ; his weight had increased and he felt stronger. He gets up only once at night to urinate. The urine is normal in color but still contains tubercle bacilli.

These cases of urinary tuberculosis, Dr. Brown said, are interesting because of the remarkably satisfactory stand made in the face of the disease, without the advantages of climatic change or any treatment excepting tonics and generous diet.

DR. L. BOLTON BANGS said that he too has come to the decided conviction that these patients are better off under hygienic treatment, and without sur-

gical interference, unless we can find some positive ulceration on the bladder walls. Where there is only intense hyperæmia at the base of the bladder, without distinct loss of tissue, surgical treatment is apt to do harm rather than good.

DR. SAMUEL ALEXANDER expressed the opinion that, as a rule, the kidney is rarely the primary seat of tubercular disease, and that it is more common in females than in males. In the first case reported by Dr. Brown, even granting that there was a small ulceration in the bladder, it would have been justifiable to cut down on the left kidney and at least explore it. All the symptoms in that case, as well as the woman's history, point to the left kidney as the seat of the tubercular disease. Dr. Alexander said he agreed with Dr. Bangs that in many cases of vesical tuberculosis surgical interference is likely to do harm. One mistake that is often made is to open the bladder of a patient whose urine contains tubercle bacilli, and to curette the swollen, nodular mucous membrane. In such cases drainage, not too prolonged, is apt to be beneficial. The question of operative interference in ulcerations of the bladder is still an unsettled one: drainage gives temporary relief, but the ultimate result, so far as the tuberculosis is concerned, is very discouraging.

DR. GEORGE WOOLSEY said that in many cases where frequency and pain on micturition were the annoying symptoms, marked benefit followed injections of a ten-per-cent emulsion of iodoform in olive oil.

DR. ALEXANDER said that injections of iodoform into the bladder are often very painful; the instillations are less painful.

DR. W. K. OTIS said he was particularly interested in that case reported by Dr. Brown in which there were no urinary symptoms and no pus in the urine, and yet the tubercle bacilli were always present. He has always thought that tubercle bacilli do not appear in the urine unless there is an open lesion along the course of the urinary tract.

DR. EUGENE FULLER said that in some of these cases the vesical symptoms are markedly relieved by lavage of the bladder, using mild solutions of corrosive sublimate, 1-8,000 or 1-10,000.

DR. BROWN, in closing the discussion, said that in one of the cases reported, in which there were no urinary symptoms whatever, he was at a loss to account for the constant presence of the tubercle bacilli in the urine. Various theories have been advanced to account for this. One is that the bacilli circulate in the blood and are carried through the kidney by the blood stream.

Some Considerations on Prostatectomy.*—By DR. GEORGE WOOLSEY.

DR. ALEXANDER said the modes of attack in cases of prostatectomy seem to have narrowed themselves down to the combined operation, which is the proper one, both on account of the ease with which the prostate is reached, and also because of the advantages that are gained by perineal drainage, which were first pointed out by Dr. Keyes. In many cases, he said, the prostate can be enucleated with comparative ease, and without injuring the mucous membrane, after the manner described by him in a paper read before the American Association of Genito-Urinary Surgeons at Washington last May. In this operation the suprapubic opening is simply made to inspect the prostate and press it downward as it is being shelled out. The advantages of this operation are that there is less chance of septic infection; there is free drain-

* Will be published.

age; a low level is given to the prostatic urethra; and, lastly, the free hæmorrhage which results from cutting the mucous membrane of the bladder is avoided. He has recently employed this method in four cases coming under his observation, and in each instance the result has been very satisfactory. These cases he shortly expects to report in detail.

DR. BANGS referred to two patients upon whom he operated several years ago, opening the bladder above the pubes and cutting away the mucous membrane and prostatic outgrowths. In spite of the fact that the prostatic urethra was dilated in both instances and a low level obtained, the patients enjoyed spontaneous urination for only a brief period. In one of these cases he subsequently did a perineal operation for the removal of stone, and again dilated the urethra. He ascribed the failure to get spontaneous urination in many of these cases to the fact that there is an extra-vesical growth of the prostate which surrounds the prostatic urethra and projects forward into the membranous portion.

DR. OTIS said he had seen a number of cases where the combined operation was performed in which the perineal tube failed to drain, the urine coming out through the suprapubic opening. Usually it is not advisable to close the upper wound entirely, as there is often a chronic cystitis and a bad condition of the urine.

DR. FULLER said he had had no difficulty in draining these cases through the perineal opening.

DR. ALEXANDER said he employs a large perineal tube (No. 30 or 31 French), and then a smaller tube is introduced from above and the wound closed around it.

DR. WOOLSEY, in closing the discussion, said that the cases reported by Dr. Bangs afford further evidence of the fact that the removal of the intra-vesical part of the prostate is not all that is necessary to effect a cure.

Double Castration for Hypertrophy of the Prostate: Report of a Case.—By DR. J. R. HAYDEN.

The patient was a man aged seventy years, married, a dentist. He was temperate in his habits and had never had any venereal or genito-urinary disease. Five years before coming under observation he began to suffer from frequent urination at night, and soon afterward during the day. When Dr. Hayden first saw him, his condition was as follows: He had to get up five or six times at night to urinate; during the day he was able to hold his water from thirty to sixty minutes. Considerable vesical and rectal tenesmus accompanied each act. The urine was cloudy and ammoniacal. While straining to urinate, the penis became congested and there was a partial erection. At this time the patient was drawing off his urine several times a day and washing his bladder. Of late catheterization had become painful and almost impossible. The capacity of the bladder was six ounces, and there were four ounces of residual urine. A rectal examination showed that the prostate was hard, smooth, and fully twice its normal size. The obstruction to urination seemed to be due particularly to an enlargement of the posterior end of the median lobe.

In December, 1894, double castration was performed. During the first twenty-four hours following the operation there was severe spasm of the compressor muscle, and the patient had to be aspirated several times. On the fifth day a small rubber catheter passed into the bladder; this had not been possible for many months. The urine was clearer and the tenesmus and pain

less severe. On the tenth day a No. 18 French catheter passed in quite readily. To the touch the gland seemed softer; it was absolutely painless on pressure. On the twentieth day the patient felt much improved and was able to pass his urine freely without the aid of a catheter. On the thirty-first day twenty-seven ounces of urine were passed per urethra. Two months after the operation the patient stated that he was absolutely free from all pain. His general condition was much improved, and he was gaining in weight. He was able to resume his work. The urinary intervals during the day were from two to three hours; during the night, from three to five hours. Since the operation he has had no erections or sexual desire. He can hold his water for half an hour after the desire to urinate comes on. The length of the urethra decreased three quarters of an inch since the operation. Thompson's searcher, which it had formerly been impossible to introduce, now enters the bladder with ease. The quantity of residual urine has decreased from four to two ounces. The capacity of the bladder has materially increased. On April 9th the patient's condition is practically the same as when last reported, although he has more control over his bladder.

In conclusion, Dr. Hayden said that the operation of castration in this case was suggested principally on account of the man's sexual symptoms, which were very distressing. He did not recommend the operation as a routine measure in all cases of prostatic hypertrophy, and simply presented this as an accurate clinical report of the patient's condition following the operation.

DR. BANGS said he regarded this case as one of sexual erethism, particularly as it was in a dentist. Such cases are not uncommon. A dentist's occupation is such that it compels him to stand for long periods in close contact with women, and in some this induces a sexual condition which is pitiful. If Dr. Hayden's patient could have been relieved of his sexual erethism, the progressive improvement would probably have occurred without castration.

DR. FULLER referred to a case coming under his observation which was somewhat similar to the one reported by Dr. Hayden. The patient was an old man of seventy, who had a strong sexual desire and capacity. He had an enlarged prostate, and suffered from retention of urine which it was very difficult to relieve. Under rest in bed and systematic catheterization and washing, the vesical symptoms gradually improved, and at the present time the man is able to pass his urine spontaneously without any trouble.

DR. ALEXANDER said that in the cases thus far reported in which this operation has been performed there is some question in regard to the amount of congestion of the prostate that existed and the condition of the bladder. It is not uncommon to see cases of this character in which careful aseptic catheterization and rest in bed are followed by spontaneous urination. This treatment, too, would account for the decrease in size of the prostate. The length of the urethra in prostatics varies at different times, depending on the amount of prostatic congestion. We can not say because the urethra has diminished in length that the prostate has undergone atrophy, nor can this be proved by the most careful rectal examination. We may find that the prostate has become softer because it has lost its congestion. The speaker stated that in his opinion the cases thus far reported of castration for hypertrophied prostate do not justify the operation as a surgical procedure, nor can it be classed in any other category than as a physiological experiment.

DR. HAYDEN stated that catheterization and rest in bed had been tried in this case without benefiting the patient's condition.

Items.

Preliminary Programme. American Association of Genito-Urinary Surgeons.—The ninth meeting of this association will take place at the Clifton House, Niagara Falls, on May 28, 29, and 30, 1895. Members desiring rooms should secure them by writing to Mr. George M. Colburn, Niagara Falls, N. Y.

The following papers have been promised: Gonorrhœa in Women, by Dr. R. W. Taylor, of New York; A Case of Peri-prostatic Abscess rupturing into the Rectum, Urethra, and Ischio-rectal Fossa, by Dr. George E. Brewer, of New York; Report of a Case of Early Obstruction of the Ejaculatory Ducts, by Dr. E. C. Burnett, of St. Louis; The Treatment of Tubercular Epididymitis, by Dr. Edwin Martin, of Philadelphia; Iodoform Ointment Injections in the Treatment of Suppurative Adenitis of the Groin, by Dr. J. R. Hayden, of New York; Calcification of the Tunica Vaginalis, by Dr. Roswell Park, of Buffalo; A New Treatment for Epididymitis and Orchitis, by Dr. James P. Tuttle, of New York; Chronic Circumscribed Inflammation of the Corpora Cavemosa, by Dr. W. K. Otis, of New York; Treatment of Strictures of the Deep Urethra, by Dr. Paul Thorndike, of Boston; Some Modifications in the Operative Technique of Prostatectomy, by Dr. Samuel Alexander, of New York; Prostatectomy, by Dr. Eugene Fuller, of New York; Milking the Prostate, by Dr. W. T. Belfield, of Chicago; Notes on Two Cases of Double Orchidectomy; Notes on Pathological Semblances between Chancre and Chancroid, by Dr. E. E. King, of Toronto; The Neurotic Bladder, by Dr. Alexander W. Stein, of New York; The Improved Metro-Urethrotome, by Dr. F. Tilden Browne, of New York; and On Some Points in the Diagnosis of Diseases of the Bladder, by Dr. L. Bolton Bangs, of New York.

New instruments will be presented by Drs. Bransford Lewis, W. K. Otis, and others.

W. K. OTIS, *Secretary*.

PERIODICAL LITERATURE OF DERMATOLOGY, SYPHILIS, AND GENITO-URINARY DISEASES.

COMPILED BY

GEORGE THOMAS JACKSON, M. D.

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(To be continued.)

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Original Communications.

SIX SUCCESSFUL AND SUCCESSIVE CASES OF PROSTATECTOMY.*

By EUGENE FULLER, M. D.,
New York.

AT the present time the management of those suffering from the severer grades of senile prostatic hypertrophy is being much discussed. By the severer grades of this disease are meant such cases as are not amenable to or tolerant of the catheter. In order to relieve them, the urinary outflow must be diverted from its customary channel or the obstruction must be removed. The only way to divert the urinary flow is by the establishment of a permanent hypogastric urinary fistula, an unsatisfactory procedure which has happily found little favor in this country. The methods, however, which have been advocated for the removal of the obstruction are numerous. These methods can best be divided into two classes. Under the first class are grouped those operative procedures which aim to directly remove the obstruction; under the second, those whose aim is to cause an atrophy in the obstructing gland by interfering with its nerve or blood supply. Double castration seems to cause more or less atrophy of the prostate, probably by interfering with the nerve supply to the part, while ligation of both internal iliac arteries apparently to some extent accomplishes the same result by shutting off the blood supply. The only true argument against the first group of procedures, whose aim is the direct removal of the obstruction, is their mortality. This, of course, is a strong argument, since the subjects are elderly and, owing

* Read before the American Association of Genito-Urinary Surgeons at the Niagara Meeting, May, 1895.

to the nature of their disease, prone to renal insufficiency. Everything else is in favor of direct removal, for in all cases the operator should be able to thoroughly remove the obstruction. He should also be able to accomplish this without permanent injury to the vesical neck by reason of lacerating or tearing away the mucous structures. When once such an obstruction is thoroughly removed the patient can be safely assured that he will never suffer from prostatic hypertrophy again.

In almost all cases also the use of the catheter can be entirely dispensed with after convalescence from the operation is wholly established, the apparently atonied bladder gradually regaining its muscular force until finally it throws off a full forcible stream. In many instances previous evidences of renal trouble, due to pyelitis caused by dilatation of the ureters and pelves, gradually disappear as these muscular structures also in like manner as the bladder regain their tone. As a result of all these changes and regenerations, the patient at the end of six months or a year after the operation is apt to report hale and hearty, declaring that he feels ten years younger and that his act of urination is all that he could desire. I am well aware that many surgeons will consider that the foregoing statement in favor of the radical removal of the obstruction is too rose-colored, and will point to the indifferent results obtained in many instances by earlier operators to sustain their opinions. I, however, hold that the argument against prostatectomy on the ground that the results to be expected from it are indefinite and unsatisfactory is a false one, and that it is based on cases where the removal of the hypertrophy at the time of the operation was incomplete. In many of the earlier unsatisfactory cases the object of the operator was simply to chisel out, as it were, a canal through the obstruction at the vesical base connecting the post-prostatic vesical *cul-de-sac* with the membranous urethra, no attempt being made to remove lateral obstructions or the rigid hypertrophies surrounding the prostatic urethra. If, however, all the hypertrophies, median, lateral, and round about the prostatic urethra, are removed as they should be, and as they can be by adopting the method I advocate, then I claim that the results, as far so the bladder is concerned, are, barring mortality, satisfactory.

As regards double castration, the only argument in its favor is that it ought to be accomplished with little or no danger to life, and that it offers a chance for relief.

This argument should be given the greatest weight in such cases as are evidently past making, from a physical standpoint, the struggle attendant on the radical operation.

Against it it can be said that it is not applicable to cases representing an emergency where, owing to the condition of the prostatic obstruction, catheterization is impossible and speedy free drainage is imperative. Three of the cases to be reported by me represent examples of this description.

It emasculates the man submitting to it; and although it may be said that men in their sixties, the age of most of these sufferers, have no further need—or ought to have no further need—of their testicles, still my experience has been that most prostatitics dread the loss of their testicles more than the dangers attendant on a radical operation, and that if they feel that their adviser is competent to remove their prostates they choose the more radical procedure.

Castration is not expected to accomplish the same radical relief that thorough removal does. It is still in its experimental stage, and just how much in the way of real prostatic atrophy it causes in senile hypertrophy is not as yet an established fact. In soft, succulent hypertrophies it probably accomplishes much; while in hard, fibrous ones—and especially if these be also infiltrated with lime salts, as every now and then occurs—it is hard to see how such a procedure as castration could accomplish much.

Nothing can be said in favor of the operation to accomplish atrophy of the prostate by ligating both internal iliac arteries, since the dangers attendant on it are probably fully as great as those attached to the direct removal of the obstruction, while the benefits to be expected from it are indefinite and at best only partial.

Since the final results from prostatectomy are good if only the growth is thoroughly removed, the operation is surely destined to become popular and general if it can be shown that the mortality from it is moderate; for the great majority of these cases at the time when prostatectomy is first suggested to them have, as it were, come to the end of their rope, medically speaking, so that if the operation is not done little remains to occupy the medical attendant aside from administering anodynes and holding the hand until death occurs. Therefore any radical procedure which offers to the patient and his family at such a time fair prospects of relief is apt to be accepted.

The objects of this paper are to show that prostatectomy can be successfully accomplished with comparatively small mortality, and to present to the profession the operative methods by which I have attained my results.

In the earlier operations of this nature not only was the prostatic obstruction in many instances imperfectly removed, thereby giving imperfect and unsatisfactory results, but the death-rate also was large.

The chief causes for death were hæmorrhage, generally primary, sometimes secondary; shock, oftentimes intensified or caused by the removal of vesical tampons, always a difficult matter, which had been tightly packed into the bladder to stop hæmorrhage; sepsis, which was favored and intensified by extensive damage to the vesical walls in the prostatic region, and by the open and exposed state of the suprapubic wound; defective drainage; and kidney insufficiency.

To avoid as far as possible these mishaps I have adopted the following procedure: The patient is placed flat on his back, neither the Trendelenburg position nor the Petersen bag being commonly found necessary. The bladder is carefully washed out, and then left moderately distended to the extent of from eight to twelve ounces. The next step is to open the bladder suprapubically, the general directions which had been laid down by Keyes being followed. The forefinger of the left hand is then introduced into the bladder, the location and extent of the prostatic obstruction determined, and the vesical opening of the urethra located. In the right hand is grasped a pair of rough, serrated-edged scissors with a long handle. These scissors are slipped along the left forefinger to the urethral opening, and are made to cut through the bladder wall in that region. The cut extends from the lower margin of the internal vesical opening of the urethra backward for an inch to an inch and a half. The blades of the scissors being rough and serrated, make an incision which bleeds but little. Then one of the forefingers, whichever the operator may find the more convenient, is slipped through the vesical hole made by the serrated scissors, while at the same time the fist of the other hand makes firm counter-pressure against the perinæum. By means of this counter-pressure the prostatic growth is brought well into the reach of the forefinger of the other hand, which is employed all this time in enucleating the prostatic obstruction *en masse*, or piece by piece, as the case may be. This enucleation can be easily and speedily accomplished in this manner, and should not be desisted in until all the lateral and median hypertrophies, as well as all hypertrophies along the line of the prostatic urethra, have been removed. The vesical walls at the base, as elsewhere, are very elastic and dilatable, so that it will be found that the little cut made through the bottom of the bladder will be large enough to admit of the passage through it of the enucleated prostate.

[Figs. 1 and 2 accompanying this article are natural-sized illustrations of prostatic hypertrophies which I have enucleated in the manner described. In Fig. 1 the whole hypertrophy was removed in one piece, while in Fig. 2 the obstruction came away in three pieces,



FIG. 1.—Dr. Fuller's specimens of prostatic hypertrophy removed by enucleation (natural size.)
Showing the entire hypertrophy enucleated in one piece.



FIG. 2.—Showing the hypertrophy enucleated in three pieces, two lateral and a median.

representing two lateral and a median hypertrophy. The hypertrophy shown in Fig. 1 was taken from my case shortly to be described as Case E, while those in Fig. 2 were taken from Case F.] A perineal section is then made, and a large size (twenty-six American) soft rubber tube is passed through the perineal cut, and the cut through which the prostate was enucleated, into the bladder. After this, hot-water irrigation is employed for some minutes to wash out blood clot and to stop oozing. Then the suprapubic wound is closed by a deep layer of catgut sutures which include the bladder wall, and by a more superficial layer of silkworm gut (Florentine) sutures. About in the middle of the cut the catgut stitch is omitted and a deep Florentine gut suture is taken, which includes the vesical walls and the whole extent of the lateral abdominal walls. This suture, however, is not tied at the time of operation, thus allowing a rubber suprapubic drainage tube to temporarily remain in position. At the end of four or five days, however, this suprapubic drain may in most instances be removed; then this last Florentine ligature can be tied, thus entirely closing the suprapubic cut. It is best not to remove these Florentine sutures till after the patient is up and about, as without their firm support there is oftentimes a tendency for the soft scar tissue of the wound to give, thus allowing a considerable spreading of the abdominal structures.

My method of enucleating the prostate through a small hole made in the base of the bladder is accomplished by a technique almost the opposite of that advocated by Nicoll, of Glasgow, in the *Lancet*, April 14, 1894, and by Alexander, of New York, independently of Nicoll, at the May (1894) meeting of the American Genito-Urinary Association. These gentlemen enucleate the prostate through a spacious perineal wound, that gland being brought into the reach of the perineal finger by the pressure exerted downward and forward by the finger or fingers of the other hand introduced into the bladder through a suprapubic incision. Then after such enucleation a dependent incision is made into the bladder and perineal drainage established. My first case of enucleation by my method was performed early in May, 1894, before I was aware of Nicoll's publication, and before Alexander had also reported that method. I can say of my method of enucleation that by it the prostatic hypertrophy can be easily and thoroughly removed without damage to the structures composing the vesical neck, and that hæmorrhage resulting from it has always been of little consequence. Owing to the slight amount of bleeding, I have always found it feasible to sew up as I have described the suprapubic cut, and have never experienced trouble from secondary hæmorrhage. The after treatment consists largely in careful and thorough vesical irrigation in conjunc-

tion with the internal administration of a large amount of diuretic water in order to keep the kidney secretion free and active. By the adoption of this method I feel that the customary causes of death after prostatectomy can be in large measure avoided, and in substantiation of my opinion I have to report the following six successful and successive cases. Five of these cases illustrate directly the method of enucleation just described by the suprapubic route. In one of them, however, it was possible to remove the growth through the perinæum without resort to the suprapubic cut.

Case A.—Sixty-six years old. First seen early in May, 1894. Having been called in an emergency at midnight, I found the patient straining violently on a full bladder. For eighteen hours he had been unable to urinate, though for the last few hours there had been a dribbling from overflow. He had bled freely from the meatus as the result of vigorous and unsuccessful attempts at catheterization. The perinæum was swollen and indurated, showing evidences of extravasation of blood and urine. I could not pass a catheter even under chloroform. Suprapubic aspiration was resorted to, and about a quart of urine, so mixed with blood and clot that it with difficulty passed through the aspirating needle, was withdrawn. The patient consented to operation, and early in the morning I performed suprapubic prostatectomy, enucleating the gland according to the method I have described. The patient at the time of operation was suffering from shock and suppression, due to the retention of the day before. His pulse was feeble and his tongue dry. I operated as quickly as possible, giving but little anæsthetic. I removed a large right lateral hypertrophy and the median hypertrophy, which last was moderate. Owing to the bad condition of the patient, I did not wait to remove a small left lateral hypertrophy. The patient rallied from the operation, convalesced without any disagreeable complications, and left the hospital during the middle of the fourth week of his confinement. He can now pass his urine naturally at proper intervals, emptying his bladder after each act.

Case B.—Sixty years old. When first seen, was in a state of retention of urine, with dribbling, owing to prostatic obstruction. He had been in that condition some time. A catheter was passed under antiseptic precautions, and the attempt made to break him into catheter life. He was shown how to use his catheter, and apparently was able to use it himself at the end of a week. At the end of that time, however, in some unaccountable way he twisted and bent upon itself in his urethra a gum-elastic instrument in a vain attempt to draw his urine, and in his effort to withdraw his bent-up instrument he pro-

duced an extensive rent in the membranous urethra. Much vesical tenesmus followed, associated with chill and fever. Chloroform had to be given in order to pass a catheter, and only then a silver instrument could be passed, and that with great difficulty. The case being then one of emergency, was operated on. I made the suprapubic incision, and enucleated in the way described a large collarlike hypertrophy of the prostate. The case did finely, being confined to bed but three weeks. The result is all that can be desired. He urinates naturally, with good stream, at proper intervals, emptying his bladder after each act.

Case C.—Seventy-three years old. When first seen, was in a state of acute retention, with great vesical distention due to prostatic obstruction. The immediate cause of the retention had been exposure to cold under circumstances which did not allow of his making the attempt to urinate when first called upon to do so. I succeeded with some difficulty in passing a gum-elastic catheter. This instrument was left in the urethra and tied securely. The case was then turned over to his regular attending physician, with directions to remove the catheter at the end of thirty-six hours, after which time resort to regular catheterization was prescribed as occasion required. I was called again at the end of four days in a hurry. He was again in a state of retention. He had some fever, and had bled freely from the urethra. I found he had discharged his original doctor, and that he had had several others besides since I had seen him. All had found great difficulty in drawing his urine. I made an attempt and found that nothing would pass except a silver instrument with an extreme prostatic curve. This instrument could only be passed with the greatest difficulty. The urine drawn off was bloody and somewhat decomposed. There were evidences of urethral lacerations in the region of the prostatic sinus. On the next attempt even this instrument would not pass, and I found it necessary to aspirate. Up to this time the patient had been very obstinate, and would not listen to any proposition recommending a cutting operation. I now told him, however, that unless he left me free to act as I saw fit I would give up his case. He then consented to operation. At this time he was suffering from renal suppression and evidences of commencing sepsis. His pulse was also feeble. Taking into consideration his advanced age, with all these bad symptoms, the outlook for a favorable result from a radical operation was certainly poor. I, however, determined upon and did a suprapubic prostatectomy according to the method herein advocated. I found two very large lateral hypertrophies. The median lobe was not marked. These hypertrophies were all thoroughly enucleated without

difficulty. One of the lateral ones was found to have been pierced to its center by a punctate wound of recent date, evidently made by a catheter. After the operation the patient convalesced slowly but steadily, and left the hospital in his fifth week. Five months after the operation he reported hale and hearty, stating that he felt ten years younger. His urinations were normal, natural, and complete, each act emptying the bladder. He stated that he had not urinated since boyhood with such force and satisfaction as at the present time.

Case D.—Forty-eight years old. About a year and a half before consulting me he had noticed that at times he urinated with difficulty. This difficulty had gradually increased until he was seized with complete retention, which accident had occurred six months before his first consultation with me. Since that time he had been obliged to depend entirely on his catheter. Sometimes he had experienced great difficulty in introducing his instrument. This difficulty was becoming more marked, so that he felt that other and more radical measures should be employed for his relief. The urine was slightly purulent, but of good quality. Rectal examination showed but slight enlargement of the prostate. A good-sized steel instrument could be passed into the bladder provided its end was kept well up against the roof of the prostatic urethra during its passage, otherwise the instrument would be arrested by a firm obstruction in connection with the floor of the prostatic urethra. Owing to the age of the patient and to the small size of the prostate as felt per rectum, it was not thought necessary to make a suprapubic incision, the perineal route being employed. As the result of this operation a very hard fibrous mass, similar in shape to but somewhat smaller than a hen's egg, was found lying transversely across the floor of the bladder just at the vesical neck. This mass was cut through by the knife in making the perineal incision. It was, however, so fibrous and so firmly attached to the capsule of the prostate that it was found impossible to enucleate it, and it consequently had to be cut away by the use both of the serrated scissors and of prostatectomy cutting forceps. This was the only case out of the six where it was found impossible to accomplish enucleation, and I am inclined to suspect that the growth may prove to be more of the nature of a fibroma originating in the capsule of the prostate than of a senile prostatic hypertrophy. The patient recovered from the operation without trouble, and at the end of his third week was passing a full, forcible stream along the urethra. He went home shortly after with a perfect result, his urine being clear and his urinations being normal and complete.

Case E.—Fifty-eight years old, a charity case. He gave a history of a sudden retention of urine four years before consulting me. At that time he lay in bed a week or ten days, suffering intensely without surgical relief, the urine dribbling passively away after the vesical distention had become extreme. Finally, the bladder unaided regained a little of its expulsive force. Since that time he had continually suffered from urgent, frequent, and difficult urination day and night, with at times attacks of complete retention. For relief from his latter attacks of retention he had visited dispensaries and hospitals and been catheterized. After leaving these institutions, however, the use of the catheter had always been discontinued, on the ground that he could not use the instrument himself, and that it made him very sore locally as well as feverish. On examining him I found a distended bladder, the summit of which was halfway between the pubes and umbilicus. Rectal feel showed the prostate to be very large and hard. The urine was of low specific gravity, abnormally abundant in amount, slightly acid, and loaded with albumin together with granular and hyaline casts. It was also bacterial and moderately purulent. The tongue was dry at times, and there were stomach and bowel disturbances which I took to be of a uræmic nature. The patient was feeble and altogether an extremely bad surgical risk. Vesical drainage was, however, called for in order to give him relief. I decided to enucleate the prostate by the suprapubic operation and to establish as usual perineal drainage. I enucleated two large lateral hypertrophies together with a smaller median one, the whole mass coming away in one piece (see Fig. 1). The operation was easy of performance and there were no attendant complications. There was considerable suppression after the operation, and on the third day the patient, being delirious tore off his dressings and pulled out the perineal and suprapubic drainage tubes. These were never replaced. By careful attention and abundant diuresis this severe uræmic attack was finally weathered. Owing to his wretched condition, and partly also to his premature removal of the drainage tubes, a slough occurred in the space of Retzius. All the vesical suffering was removed by the operation, and the urine improved in quality. Four weeks after the operation the patient sat up, and now, six weeks after, he walks about the ward with the aid of an attendant. The urine, now clean, still comes through the granulating suprapubic wound, which the slough made quite extensive. There is good expansive force to the bladder, and with the suprapubic wound closed I feel that urination will be accomplished without difficulty. The uræmic symptoms have not all disappeared, and at times he is drowsy or excitable. It is

probable that after a time he will succumb to his nephritis, and such is to be expected, especially since, owing to his poverty, comparatively little can be done for him. In this case double castration was suggested, but refused by the patient.

Case F.—Sixty-three years old. When first seen by me he was using a catheter, being unable to void any urine naturally, owing to prostatic hypertrophy. He was dissatisfied with catheter life and wanted something radical done. He was not willing to lose his testicles. His urine was of good quality and his prostate large. I performed the suprapubic operation and enucleated two large lateral hypertrophies together with a collarlike median hypertrophy partially surrounding the prostatic urethra (see Fig. 2). He did not tolerate well the perineal drainage tube, since it caused much tenesmus. Consequently I removed it on the third day, letting him drain through the suprapubic tube. On the twentieth day after the operation the suprapubic wound had so closed that he began to pass urine through the urethra. Now, at the end of his fourth week, he is able to leave the hospital, passing his urine freely, easily, and completely by the urethra.

ON SOME AFFECTIONS OF THE NERVOUS SYSTEM OCCURRING IN THE EARLY AND LATE STAGES OF ACQUIRED SYPHILIS.

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[CONTINUED FROM PAGE 190.]

SYPHILIS of the spinal cord is held responsible for a large proportion of the diseases of that organ. Although it may simulate almost any clinical type of spinal-cord disease, yet, like syphilis of other parts of the nervous system, it most frequently shows itself either by a complex of symptoms now known as syphilitic spinal paralysis, or by tabes dorsoalis, or by localizing symptoms pointing to a gummatous formation, or by diffused symptoms indicating a meningomyelitis. Beevor (*Brit. Med. Journ.*, November, 1893) has put on record the history of a patient in whom syphilitic tumors of the spinal cord caused symptoms simulating syringomyelia. The patient denied syphilis, and developed a clinical picture consisting of weakness of the left leg, obtuseness of sensation of the right knee, and shortly after-

ward weakness of the left arm. This was followed by dystrophy of both arms and paralysis of the left leg. Sensibility for pain, heat, and cold in the right leg and thigh was lost, but tactile sensibility was preserved. On the left side the patellar reflex was increased, and there was ankle clonus. In the course of the disease, the ulnar side of the right arm and the radial side of the left arm showed loss of sensibility to pain. The autopsy demonstrated the presence of two syphilitic tumors at the cervico-dorsal junction of the spinal cord. Any number of cases which go to show how syphilis of the cord can closely simulate such definite clinical entities as progressive muscular atrophy, poliomyelitis anterior, and Landry's paralysis could be cited.

Syphilitic disease of the spinal vertebræ is of rare occurrence. In a recent article Gerhardts remarks that in eight years (*Berlin. klin. Wochenschr.*, 1893, No. 50) only two cases have been diagnosticated in his clinic, and of these one recovered. He believes that syphilitic disease of the vertebræ may be secondary to syphilitic disease of the cranial bones, just as the spinal cord may show syphilitic affection secondary to that of the brain; or that the disease of the vertebræ may be consequent to syphilitic disease of the neck. Trauma alone is a rare ætiological factor in causing disease of the vertebræ. Simple spinal meningitis of syphilitic origin is quite as rare as syphilitic disease of the vertebræ. In fact, the truth is, it is a diagnosis rarely if ever made by the neurologist; and if made, it is never corroborated by the pathologist. When nocturnal rachialgia exists alone, and is responsive to antiluetic treatment, the diagnosis is allowable. As in brain affections, syphilitic disease of the blood-vessels of the spinal cord is one of the earlier manifestations of syphilis. So many cases of syphilitic disease of the blood-vessels of the cord have been reported that it is difficult to make a selection that will give an idea of their frequency and reality, and among them are many in which not a suspicion of doubt can arise as to their true luetic character.

The cases in which the vessels of the cord are diseased present themselves clinically under the picture of hæmatomyelia or acute myelitis. If the pathological process has shown its effects principally in the veins, and that to obstruct the return circulation, the result will be a thrombosis, and consequent deprivation of circulation in the area from which it returns blood, or a rupture of one of the arteries, particularly if the latter are simultaneously diseased. In the latter case the obstruction to the circulation in the veins throws additional pressure on the arterioles, and a rupture of the latter is the result. When the luetic degeneration of the veins is a slow process and a considerable time elapses before obliteration occurs, the clinical picture

resulting may be that of an acute myelitis, although in reality the pathological process is one of softening in consequence of syphilitic affection of numerous vessels of the pia mater, very like the necrobiosis of acute inflammation. For instance, in a case reported by Finlay (*Montreal Medical Journal*, March, 1891) a patient had a syphilitic paraplegia eight months after infection, which was diagnosticated as myelitis. Eight months later the patient had an attack of hemiplegia. Inferentially the process in the cerebral arteries which led to the hemiplegia was not unlike that which took place in the vessels of the cord. In a case related by Walker (*Lancet*, June 8, 1889), paraplegia developed while the patient was under treatment for secondary syphilis. Two months after the initial lesion the secondary eruption appeared. The paraplegia of slow development, attended with pain and weakness in the legs, was concomitant with an iritis. Later a most characteristic picture of acute myelitis, retention of urine, incontinence of fæces, absent patellar reflex, bedsores, cystitis, etc., developed. After death the cord was found to be softened for about an inch and a half in the lumbar region. Microscopically the softened parts of the cord showed the arteries of the pia to be occluded by a thickening of the internal coat. Siemerling (*Archiv für Psych.*, vol. xxii, pp. 1 and 2, 1891) cites the case of a woman who developed paraplegia seven months after syphilitic infection, which clinically pointed to the diagnosis of a dorsal myelitis. The autopsy showed gummatous new formations going out from the pia, and involving the white and gray substance and its roots. The blood-vessels showed changes characteristic of syphilitic endarteritis. Settas (*Compt. rend. hebdom. des séances et mém. de la Soc. de biol.*, April 15, 1893) has given in exemplary detail the pathological anatomical changes in the cord in cases of paraplegia occurring in the early stages of syphilis. He says the vessels of the pia are diseased in the characteristic fashion made classical by the teachings of Heubner (*Ziemssen's Cyclopædia*), and not infrequently small miliary gummata are also present. In such cases, if the obliteration is not sufficient to produce ischæmia, a softening in the region corresponding to the diseased arteries occurs; following this an ascending and descending degeneration, and finally a sclerosis resulting through a proliferation into the interstitial tissue.

In the light of such evidence, and of much more which might be quoted from the literature, it is difficult to understand what Gowers has recently stated to be a fact, viz., that he knew of no disease of the spinal cord that could be called syphilitic of the arteries (*Royal Med. and Chirurg. Soc.*, February 26, 1895).

Although paraplegia following syphilis can not be attributed posi-

tively to syphilitic disease of the pial vessels causing hæmatomyelia and acute myelitis unless the case comes to an autopsy, all observers are agreed that a large percentage of the cases occurring in patients who have been infected with syphilis are truly luetic, and that most of the cases of acute paraplegia that respond to treatment are due to syphilis. And though we are fully agreed with Ferrier that all cases of paraplegia occurring in syphilitic subjects are not due to the influence of that disease, yet we can not see that he substantiates his position by relating that two cases of paraplegia in syphilitic patients had eventually become cases of multiple sclerosis, for Uthoff has shown conclusively the real causal relationship existing between multiple sclerosis and syphilis.

Even though the therapeutic test in the diagnosis of syphilitic disease of the nervous system is the most unreliable one, yet it often lends important service in corroborating a diagnosis made on clinical grounds alone. The cases of syphilitic paraplegia of sudden onset in the early stages of syphilis that have been reported as cured are extremely numerous. Nonne has reported a case in which the symptoms came on three months after infection, and were characterized by lancinating pains in the legs and loins, dysuria, hyperæsthesia, paræsthesia of the right leg, and progressive weakness of the upper extremities, all of which disappeared rapidly under proper antisyphilitic treatment. The second and third cases reported by the same author, in which the symptoms occurred a few months after infection, do not differ materially either in their clinical picture, except that they were more severe, nor in their response to treatment. Potts has recorded a case (*University Med. Magazine*, November, 1892) of a man who developed ataxic paraplegia one year after the initial lesion; although the paraplegia was very complete, improvement quickly followed the beginning of specific treatment, and the patient was discharged cured in two months. Laing, of Paris, Hutchinson, of London, Sachs, of New York, and many others have recorded instances of acute syphilitic paraplegia in which the response to treatment was striking.

An interesting form of syphilitic disease of the spinal cord has recently called into nascency a considerable literature, although but three years have elapsed since Erb called the attention of the profession specifically to it under the title of Syphilitic Spinal Paralysis (*Neurolog. Centralblatt*, March 15, 1893). Erb considers that there is a type of disease occurring after syphilis, of irregular onset and course, which heretofore has been diagnosticated very naturally as transverse myelitis. The development of the symptoms is gradual, occupying weeks, months, more rarely years. These symptoms are paræsthesia, very

little pain, easily begotten fatigue, progressive weakness and stiffness of the legs, and weakness of the bladder, which may for a long time be an isolated symptom. A clinical summary of these cases may be given as follows :

1. The well-known gait of spastic spinal paralysis, associated with but relatively slight muscular rigidity, contracture, and paralysis.
2. Persistent presence of bladder symptoms ; less often symptoms referred to the rectum.
3. Marked increase of the tendon reflexes.
4. Slight but constant disturbance of sensation.
5. Failure of sexual potency.
6. The onset is gradual ; the course is irregularly progressive, unless treated, when it frequently is improved or cured.

These cases have heretofore been diagnosticated as simple myelitis syphilitica, and that is practically what they are. The following history illustrates the development of such a clinical picture :

J. F., thirty years old, male, admitted to hospital August, 1893. Family history negative. Patient in good health until six years ago, when he contracted syphilis, for which he was treated about a month. Of secondaries he remembers nothing except sores in the mouth and an eruption on the skin for which he took medicine for a week. He had no further symptoms until four years after infection ; he then complained of numbness in the back of the right thigh, and soon after a feeling in the feet, particularly the right foot, as if he were walking on velvet. Treatment which he received at a clinic did not help him, and a few weeks later he began to have dull pain between the shoulders passing down the spine. When he entered the hospital a few weeks later he was complaining of dribbling of urine, and he told of having been catheterized on one or two previous occasions. A few days after coming to the hospital he began to have a feeling in the left thigh similar to that in the right. The muscles of the thigh and calf felt stiff, and the feet felt as if they were being pricked by needles ; the reflexes of the lower extremities became greatly exaggerated. At the same time he complained of a feeling of weight and numbness in the upper extremities. Diplopia and girdle sensation were also complained of. In a few weeks the patient became almost powerless in the lower extremities, and at last was quite unable to stand even with assistance. The spasticity and increased tendon reflexes were increased. Improvement began about two months later, under vigorous use of mercury inunctions and potash internally ; he soon became able to stand, and then to get about with a spastic gait, with the aid of a stick. Improvement continued, and he left the hospital.

To recapitulate the symptoms in the order of their development in this case they are—(1) paræsthesiæ, numbness in the legs and feet, and a feeling as if treading on velvet; (2) retention, and later incontinence of urine; (3) almost complete inability to move the lower extremities, which improved markedly under antisypilitic treatment and was followed by the gait characteristic of spinal paralysis; (4) diminished sensory acuity in the lower extremities and in some places anæsthesia; (5) loss of sexual potency, and (6) increased reflexes. A year later the patient re-entered the hospital, the symptoms having again become extreme under the combined influence of the lack of treatment, alcohol, and an attack of the grippe, and the patient succumbed shortly to a tubercular pneumonia.

On microscopical investigation of the cord it was seen that the lesion was essentially a meningo-myelitis with great destruction of the axis cylinders and an overgrowth of connective tissue, principally in the posterior portion of the lateral columns, and very much less so in the peripheral portion of the columns of Goll. The meninges surrounding the cord were very much thickened and the extension of it into the parenchyma of the cord is very striking. The blood-vessels are of large caliber, their walls greatly thickened, and the perivascular lymph spaces are distended. The morbid anatomy as it exists now would seem to show that the parenchymatous lesion was secondary to the meningeal and the vascular, and that therefore the lesion is practically a meningo-myelitis. In fact, concerning the autonomy of Erb's syphilitic spinal paralysis we share the opinion of Oppenheim (*Berlin. klin. Wochenschr.*, page 837, 1893), who maintains that it may be conjectured that the type described by Erb is not a disease, but rather a stage, or group of phenomena conditioned by the particular localization of an already known morbid process; in other words nothing but a meningo-myelitis, a diffused inflammation and new formation preceding in and from the spinal meninges, tending to invade the nerve roots and the cord or to penetrate the latter by forming overgrowths or tumors.

To illustrate the baneful effects of syphilis upon the nervous system, it is but necessary to mention tabes, or locomotor ataxia. Since the time, in 1859, when Duchenne (*Archives générales de médecine*, vol. i, page 439) called attention to the fact that some of his patients who suffered from locomotor ataxia had previously been infected with syphilis, down to the present date, the conviction has been growing that tabes has its most important causation in syphilis. The profession is indebted to Fournier first for his perspicacity in tracing out the frequency of syphilis as the causative factor of tabes

and secondly for his courage in adhering to these conclusions, in the face of great opposition, until they have come to be accepted by neurologists the world over. Since 1875, when Fournier's first lessons were given on this subject at the Hôpital de Lourcine, to the present day (*Les affections parasymphilitiques*, 1894), he has held fast to the opinion that in tabes there was only one cause worthy of mention, and that syphilis. Although there are many who are unwilling to go the entire length with him and concede to syphilis potency in the production of tabes outranking every other cause, there are others of the broadest clinical culture whose experience has been such that they believe syphilis to be the only cause worthy of consideration. For instance, Erb's statistics (*Berlin. klin. Wochenschr.*, 1891, No. 29) show eighty-nine per cent of his cases to have been syphilitic; Dejerine's, ninety-two to ninety-four per cent; and Marie, in his *Leçons sur les maladies de la moelle*, says that nine tenths of all cases of tabes are the result of an ancient syphilis. Statistics of American writers are not quite so high, yet they give an average percentage of from sixty to seventy-five. In sixty-two cases of tabes under personal observation a distinct history of syphilis could be traced in forty-six. In these cases it must be remarked that the fact that the patient had some sort of a sore on the penis in the past was not considered sufficient to warrant the diagnosis of previous luetic infection. It is only when the patient gives a history of chancre, followed by some cutaneous manifestations or glandular enlargement, or a history of affection of the mucous membranes, or the presence of a scar on the penis, or the fact that he was given internal treatment after the chancre was healed by the physician who treated him, or, finally, the previous possession of symptoms which are conceded by all to be evidences of secondary manifestations, is it considered that we have premises sufficiently secure and convincing to make a diagnosis of ancient syphilis. In fact, the reckoning of all cases that have had a history of a sore on the penis as syphilitic, whether a history of any of the conditions which have just been mentioned is found or not, has been the one reason, and perhaps is yet, that such statistics as Erb's have not had the weight with the syphilographer that they are entitled to.

If to cases determined upon in the manner which I have alluded to are added others classified as suspicious, and those in whom there have been present symptoms ordinarily referred to syphilis, but in whom no history of infection can be found, this percentage will be materially increased. Cases of syphilis insontium are in comparison with the total syphilitic population very rare, yet it is within the experience of every neurologist to have seen the occurrence of some

disease such as tabes years after an innocent infection; and the inclusion of these cases will contribute their mite to the increase of the grand total of cases which claim luetic infection as responsible for their being. Thus it will be seen that even though we are not partisan in our advocacy of the banefulness of syphilis in the production of tabes, yet statistics tell as much truth in this instance as they do in any other.

The occurrence of tabes after syphilis in ninety per cent of the cases is the only ground that we have for believing that syphilis is causative of the latter disease—that is, the pathological anatomy of tabes, the lesion in the posterior roots of the spinal cord and the columns of Goll and Burdach, are by no means those which we call characteristic of syphilis from a structural standpoint. On the contrary, they are, so far as we can determine, purely degenerative, and degenerative *ab initio*—that is, not secondary to inflammatory or vascular conditions, or pressure or encroachment. I do not mean to say that the lesions in the cord may not be secondary to posterior root involvement, for it is probable that they are, but even if this be so the nature of the lesion in the posterior roots is strictly like that in the sensory columns of the cord. The lesion is, as we have said in speaking of general paresis, one that can not be explained as a syphilitic process unless we concede the existence of a toxine.

As a rule, it may be said that tabes is one of the most remote developments of constitutional syphilis, rarely developing before the end of the fifth year after infection, and more frequently after the tenth year. There have been recorded cases in which the symptoms came on within a year after infection, but, as none of these cases seem to have come to autopsy, they are not of much value in proving the early appearance of tabes. Such is a case described by Pauly (*Lyon médicale*, June 12, 1892). A man, thirty-eight years old, became infected in September, 1891; in November of the same year he had a confluent papular eruption and general adenopathy, and from this time on received mercurial treatment. In December there developed mucous patches in the mouth and about the anus, coincidently with a double iritis. During the winter he developed laryngeal crises, thoracic pains, and all the early signs of tabes, that increased rapidly in spite of vigorous treatment. At the end of the winter walking was barely possible, inco-ordination became still more marked, and all the classic symptoms of the disease were present. It does not seem possible that the pathological lesion in such a case is the same as that found in the ordinary tabes, nor are we willing to accept it as such. In all likelihood the lesion was an affection of posterior roots, the result of an

early syphilitic meningeal exudation or a polyneuritis—in short, a pseudo-tabes. However, the occurrence of such a case gives an illustration of how early and how severe the nervous manifestations of syphilis may be.

(*To be continued.*)

GONORRHŒA: ITS TREATMENT BY INTRAVESICAL INJECTIONS
OF POTASSIUM PERMANGANATE.*

A PRELIMINARY COMMUNICATION.

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SINCE my return from Europe, on April 19th, I have satisfactorily employed, with but slight modifications, the treatment of gonorrhœa introduced by Professor Janet of Paris. Most of these cases were in my department at the West Side German Dispensary, and thus far seem to bear out the results obtained in Europe.

Simple and effective as the treatment is, it is equally surprising that as yet it appears to be but little known in our country.

I sketch it here, as well as I am able to do in words, with the hope that others may employ it and favor me with their results, to be used in a more extended study of the subject, shortly to be published.

The apparatus employed consists essentially of a glass irrigator capable of holding two thousand grammes; to this is attached a rubber tube three hundred centimetres (about one hundred and twenty inches) long, whose free end is slipped over a glass nozzle about seven centimetres long and six centimetres in circumference, running to a blunt point which can easily be pressed into the meatus to occlude it entirely. E. R. W. Frank, of Berlin, who introduced this treatment into Germany, made a nozzle with an entirely flat point for very sensitive cases with exceedingly small meati.

The irrigator is filled with a warm solution of permanganate of potassium, whose strength will be mentioned later on. The irrigator is then drawn upward by a cord attached to it and passing over a pulley fixed at two metres and a half above the table or chair employed. When the irrigator has reached a height which allows a gentle stream to escape from the nozzle, while the patient, after urinating, sits or lies

* Read and demonstrated before the Society for Medical Progress, May 11, 1895.

down, the prepuce, glans, corona, and meatus are carefully cleansed with the solution in the order in which they are mentioned. Then the penis is firmly grasped and some of the solution allowed to flow into the meatus and permitted to escape at once. This is repeated, meanwhile gradually raising the irrigator still farther, until successive washings have rendered the entire urethra as clean as possible.

Then the nozzle is held into the meatus, while the patient breathes deeply or makes efforts at urination, until two hundred to five hundred grammes of the solution have flown into the bladder. In most cases the constrictor will be quite readily overcome by the pressure; in others some patience is required. When the bladder is filled, the patient is allowed to extrude the fluid, which flows forth in a vigorous stream.

The solution first used is of a strength of 1 part potassium permanganate to 6,000 of warm water; as tolerance is established, this proportion is increased to 1 to 4,000, later to 1 to 2,000, and finally to 1 to 1,000.

These vesical injections are made twice, thrice, or four times on the first day; twice on the second, third, fourth, and, if required, on the fifth day, when usually all gonococci have disappeared; then once a day until all discharge has ceased, which in Janet's most severe cases occurred on the tenth day. My success has not been so favorable; I have had several cases in which the flow persisted until the twelfth day.

Before each injection a slide is made for microscopic examination. In the first and second days but little change appears. Thenceforward the gonococci grow sparser in number, and generally on the fourth day at latest, they have a swollen appearance; the lumen between each pair of gonococci seems wider, and nowhere can any tendency to further segmentation be observed. They probably are then undergoing a species of involution, or may be returning to that state in which some authors claim them as normal residents of the urethra. On the following day the pus, which has become thin and water-colored, is found free of gonococci.

Then the injections need be given but once a day until the flow ceases entirely. This frequently is on the sixth day of treatment.

It is my habit to order patients to return one week after the flow has ceased. I then make an irritant injection of silver nitrate. A strength of two per centum generally suffices to produce a copious flow within six to twelve hours. If this flow is found to contain gonococci, I repeat the procedures above described until the discharge ceases. Then I allow the patient to rest from treatment for another

week. The discharge then produced by silver nitrate contains no gonococci and disappears within twenty-four or forty-eight hours, as do other simple urethrites, without any treatment whatever.

If, however, the discharge evoked by the first silver-nitrate injection shows no gonococci, which occurs in the vast majority of cases, the patient receives another such injection a week later, and if then the discharge is free from gonococci, the patient is discharged, cured.

I hope to demonstrate the technique of this treatment before the summer vacation. I will then show that it is a mistake to assume that the bladder can not be filled through the urethra without a catheter. I will then also show that no danger whatever attends forcing gonococci into the bladder with the solution mentioned, and that no complications, beyond an occasional œdema of the entire penis, are incurred by this treatment. I reserve until then also a discussion of the *rationale* of this treatment, for which Professor Janet cannot receive too much credit.

BLADDER DRAINAGE AFTER SUPRAPUBIC CYSTOTOMY.

By W. C. DUGAN, M. D.,
Louisville, Ky.

DRAINING the bladder after suprapubic cystotomy is a serious question that confronts every surgeon where it is necessary to keep up drainage in those cases where the perineal method can not be resorted to. I have here an instrument for that purpose, upon which I shall make a brief comment. Those of you who take the *Philadelphia Medical News* have doubtless noticed an article by Dr. Senn, of Chicago, with a cut of an instrument he has devised for this purpose. All of us who are doing bladder surgery know how very painful those tubes are which press on the base of the bladder. Now, this instrument when introduced from above does not come in contact with the neck of the bladder, and for that reason gives no pain, and I desire to say that with one exception this "S"-shaped tube, devised by Dr. Senn, is a most excellent instrument, the one I exhibit being an exact duplicate of his. You will notice that the blind end is bulbous, with numerous perforations, which part is intended to rest against the upper part of the bladder. The part between the two curves is straight, and varies in length according to the thickness of the abdominal wall. Then the last portion is to project, for the attachment of a rubber tube. By the double curve this tube is made stationary—that is, it does not

move from side to side—and since the pressure is so placed as not to come in contact with the hypersensitive part of the bladder, it has done much to set aside the objection to the operation. But there is one very serious objection to it. The criticism I have to offer is that instead of using a tube with this bulging of the vesical end, or the portion that is inserted into the bladder, it should be of uniform size throughout. The trouble in the use of this instrument consists in the difficulty that is experienced in removing and replacing it. I introduced this instrument (Senn's) day before yesterday, and, in attempting to remove it thirty-six hours later (unless you have experienced it), you have no idea of the amount of force required to get it out and how much pain it gave my patient. Why this, I take it suggests itself, for you remember the arrangement of the different muscular layers of the bladder, and the tendency to close down when an opening is made. To overcome this difficulty I have had another instrument made after this pattern, and modified so that the vesical part is of the same size, and so that the side is perfectly straight. (See cut.) I feel very thankful



FIG. 1.—Tube devised by Dr. Senn.



FIG. 2.—Dr. Dugan's modification.

to Dr. Senn for introducing this tube, and feel sure that he will adopt this modification. It can be slipped in without trouble, and can also be removed without difficulty. Dr. Senn says his instrument can easily be removed by the patient and cleansed, and that this should be done once a day. While, no doubt, it could be done, yet it can not be claimed that this bulged end can be introduced as easily as the modified one I have suggested. Of course, if we were successful in securing primary union between the bladder and the skin, there would not be the same tendency for the fistula to close on removing the tube for

cleansing, but how often we are defeated in this in those old men with enlarged prostates, with chronic cystitis, Dr. Senn can best say.

DISCUSSION.

DR. E. R. PALMER: I have had considerable experience in the matter of bladder drainage, and think the best means of accomplishing it is to do a perineal section; then with the finger divulse the internal sphincter muscle, and introduce a soft rubber catheter, about No. 10, which is allowed to remain as long as may be necessary. I drained the bladder of a patient for a month after this method last summer, without the slightest trouble. If it is simply a question of bladder drainage, I do not think a surgeon is justified in doing a suprapubic operation, but he should rely upon the perineal method in such cases. If the operation is for removal of a stone or papilloma, then, of course, the upper route may have to be resorted to, and in such cases the instrument shown by Dr. Dugan may be of service. For bladder drainage, pure and simple, as I have stated, I am opposed to the suprapubic operation. In some cases we may simply make a perineal opening, going into the membranous urethra; then with the finger divulse the sphincter just as we would divulse the sphincter muscle of the rectum in the treatment of fistula, and we can drain the bladder for a month if necessary, then remove the catheter, and perfect relief follows, because free drainage is established. I have operated upon a great many cases of chronic, persistent cystitis by the method I have suggested, and see no occasion for going above the pubes in such cases; indeed, I believe it would be bad surgery.

DR. W. C. DUGAN: My remarks were entirely bearing upon another class of patients. In the class of cases referred to by Dr. Palmer, I do not think the drainage tube ought to be inserted at all. I have frequently operated upon cases such as he mentions, by simply introducing a finger after the membranous urethra is opened, or, if necessary, two fingers, thus divulsing the prostatic urethra thoroughly, and at the same time the sphincter vesicæ, and in all cases met with, perfect drainage was secured, yet no tube was inserted. But these patients had not reached the "prostatic age," and the object of the operation was to relieve an inflamed bladder.

The instrument I have shown is for a different purpose; it is intended for use in cases where you have such a condition of the bladder that you can not possibly drain by the perineal route. In the case reported, the "central" or "vesical lobe" of the prostate had assumed such a size and shape as to fully warrant its being called a tumor. Now, its position was such as to render perineal drainage out of the

question, unless the "Cock's" operation be performed, which no doubt most of you are familiar with. He (Cock) realized that it was impracticable to drain over a mountain, so his idea was to tunnel through by passing an instrument penetrating its base, thereby allowing that urine below the level of the top of the tumor to flow out. Now, this is the only way that we can hope for drainage by the perineal route, and since it is both dangerous and difficult compared with the high operation, I desire to place myself on record as opposing perineal drainage in those cases with enlargement of the central lobe, and to come out in favor of epicystotomy and the modified Senn's tube for permanent drainage. Second, and opposing the use of a tube at all in those cases suited to perineal drainage, since they are not necessary, for, if the prostate is divulsed as it should be, drainage is easy and thorough; and if the tube be left in the bladder resting against the prostate, my experience is that it is painful, and is accompanied by a continued flow of urine, and as a result the patient made to lie in a pool of his own urine.

Then, aside from all this, the patient is not confined to his room, nor made to smell like a portable ammonia factory should he venture to walk out, trusting to a dressing to take up his constant flow of urine; but, instead, he straps to his leg a small urinal to which is connected the soft tube mentioned—and thus he goes about, no one the least suspecting that he urinates unlike others.

I do not wish to be understood as restricting the high operation to old men when it is necessary to keep up prolonged drainage, but in all cases when in our judgment it be necessary to drain for a long time, let the subject be young or old, open above, insert a tube, and attach the urinal, and let the patients get out of bed, and, as I have had them, resume their former business.

RECURRENT ZOSTER.

By JOSEPH GRINDON, Ph. B., M. D.

Clinical Professor of Diseases of the Skin, St. Louis Medical College; Consultant to the St. Louis City Female and Smallpox Hospitals; Member of the American Dermatological Association.

(CONCLUDED FROM PAGE 202.)

Group 3.—SINGLE RECURRENCES.

SUBGROUP A.—*At a distant site.*

Case XXXIX.—Lendet's fourth case, *loc. cit.*

Epileptic, had saphenous thrombosis, cardiac disease and hæmaturia. Zoster on one side of chest four years after its appearance on the other.

*Case XL.—Bossion*³² (*zoster of face and trunk, nine years later on opposite side of trunk*).

Man, aged fifty-four. In 1881 had a vesicular eruption on right side of face and trunk which got well in three weeks. In 1890 was seen by reporter with a zoster along the fourth, fifth, and sixth ribs, extending from the spine to the sternum on the left side.

*Case XLI.—Fabre*³³ (*traumatic?*).

Man, aged sixty-eight, diabetic. Thigh bruised by a fall. Lumbo-femoral zoster on right side. Sixteen months later had pain under left scapula, followed in nine days by herpes at that point.

It may be questioned whether the trauma in this instance played a causative rôle. One or both of the attacks may have been "idiopathic."

Subgroup B.—At the same site.

*Case XLII.—Wyss*³⁴ (*lumbo-abdominal zoster repeated after thirty years*).

Man, aged sixty-six. Zoster lumbo-abdominalis. Stated that he had had the same affection at the same site thirty years before. Over a site corresponding to the nervous distribution and scattered between the new lesions were numerous cicatrices.

*Case XLIII.—Kennedy.*³⁵

Man, thoracic zoster, repeated after twenty-five years.

*Case XLIV.—New Sydenham Society's Atlas.*³⁶

In Plate XXIII typical herpes zoster is seen on the right side of the thorax to coexist with scars of a previous attack (male patient).

The last six cases, if they were instances of true recurrent zoster, which there seems no good reason for doubting, are perhaps the only ones recorded in this paper. All were men. The three whose ages were given were fifty-four, sixty-six, and sixty-eight years old. The intervals were of sixteen months, four, nine, twenty-five, and thirty years.

*Case XLV.—R. W. Taylor.*³⁷

"I once saw a case in which there were two successive attacks of herpes of the trochlear branch of the fifth nerve, the vesicles being seated in a direct line an inch long on the right side of the nose."

Subgroup C.—Site not stated.

Case XLVI.—Mauriac, loc. cit., p. 514.

Incidental mention in a foot-note of a woman who had two attacks of zoster.

Cases XLVII and XLVIII.—Stern and Fr. Skabell, quoted by Kaposi (Besnier and Doyon, second edition, vol. i, p. 443) as having seen zoster twice in the same individual. I have not access to the original papers.

Case XLIX.—Hutchinson, quoted by Pye-Smith.³⁸

“In a series of a hundred cases collected by him there was only one in which there was any history of a previous attack.”

Cases L, LI, LII, and LIII.—Pye-Smith, *loc. cit.* “In one hundred cases under the writer’s care no fewer than four of the patients gave a history of a previous attack of the same disorder, and two of them showed scars which confirmed the statement.”

Cases LIV and LV.—Hardy, *loc. cit.*: “I have seen only two examples of zona occurring twice in the same person.”

Group 4.—ZOSTER GANGREXOSUS RECIDIVUS ATYPICUS HYSTERICUS.

The cases constituting this type, to which Kaposi has given the name which appears above, present many marked points of difference which separate them from other zosteres or zosteroids, and justify their being placed off by themselves as a separate clinical, if not pathological, entity.

These points are as follows:

First. The presence of hysteria.

Second. Recurrence.

Third. The extent of nerve area involved.

Fourth. A centripetal march of the eruption, appearing first over peripheral branches and gradually extending toward the center by successive crops.

Fifth. Circinate arrangement of the vesicles, new rings forming about old ones.

Sixth. Gangrene, and peculiar appearance of the resulting crusts, looking as though produced by a cauterant chemical.

Seventh. Keloidal appearance of resulting scars.

Case LVI.—Kaposi³⁹ (*eleven crops*).

The crops were as follows:

Z. cerv. brach. dexter:

First crop, April 22 to May 1, 1874.

Second crop, June 25 to July 10, 1874.

Third crop, January 15 to January 22, 1875.

Fourth crop, June 5 to June 9, 1875.

Fifth crop, October 21.

Z. sacro-crur. et ischiadicus dexter:

Sixth crop, December 8, 1875.

Z. cerv. brach. sinister:

Seventh crop, December 18 to December 26, 1876.

Eighth crop, January 30 to February 1, 1877.

Z. cerv. brach. dexter:

Ninth crop, April 21, 1877.

Tenth crop, June, 1878 (limited to shoulder, abortive).^{*}

Z. brach. sinister:

Eleventh crop, September 14, 1878.

The brachial plexus in the supraclavicular fossa on the affected side was swollen and tender to pressure, the pain extending to the elbow. There was probably a continuous inflammation of these nerve bundles.

Case LVII.—Kaposi, *loc. cit.* (*single recurrence*).

Girl, aged twenty-four. Z. brach. sinist. Same form as first case, miliary, in groups, circinate. Rapidly gangrenous. Marked neuralgia. The first attack, three years before, had left keloidal scars.

Case LVIII.—Kaposi, *loc. cit.* (*four crops*).

Girl, aged sixteen. First crop, December 11, 1878, on both surfaces of left wrist.

Second crop, January 13, 1879, over left mamma.

Third crop, February 12, 1879, over left mamma.

Fourth crop, February 20, 1879, over forearm.

Case LIX.—Kaposi⁴⁰ (*frequent recurrences*).

Woman, aged twenty-seven, since age of twelve has had almost yearly recurrences, lasting several days. When exhibited, case presented vesicles with sunken crusting centers over the mamma and sternum. In other parts of both mammæ were crusts. Over the stomach and abdomen were white scars, and farther down an affected patch, reddened, and showing in places, through the intact epidermis, necrosis of the corium.

Case LX.—Doutrelepont⁴¹ (*acute multiple gangrene*).

Woman, aged twenty-one, stuck herself under the left thumb nail. Gangrenous patches of left upper extremity, later extending to its opposite fellow. After a while, vesicles and blebs appeared on the patches. During the next five years, and up to her death, all parts of the skin, as well as mucous membranes of the respiratory tract, conjunctivæ, and vagina, were affected. Bronchitis, pneumonia, and tuberculosis followed.

Doutrelepont thinks this a universal herpes zoster gangrænosus.

Case LXI.—Kopp.⁴² A case of generalized pemphigoid eruption followed a burn on the hand, which Kopp thinks an instance of this affection.

Under the caption "Un caso non mai osservato di zoster cronico," Tanturri⁴³ reports a case of cutaneous disease lasting four years, and characterized by groups of ulcerating and crusting lesions. A careful

perusal of this paper fails to convince one that the case possessed anything in common with zoster besides the grouping.

This concludes this rather tedious enumeration of cases. I also in my reading met with references to similar instances in Rayer and Henoch, but failed of access to them.

To sum up, it would seem probable that frequently recurring and "chronic" (overlapping) zosteriform eruptions (excluding for the present Kaposi's gangrenous type) find their cause in one of the conditions named below:

1. Chronic peripheral irritation.
2. Traumatism: *a*, central; *b*, in continuity; *c*, peripheral; *d*, reflex.
3. Pressure on a nerve trunk (osteophytes, infiltration of surrounding tissues, pleuritic adhesions).
4. Infiltration of a nerve or ganglion by some neoplasm or a simple and (in this regard) non-specific inflammation.
5. The presence in the blood of some irritating substance, such as lactic or uric acid (*arthritisme*).

These eruptions may be called *zosteroids*, inasmuch as they differ from zoster in some points and resemble it in others, and should be classed with herpes vulgaris, whether facial or progenital.

Gerhardt has enunciated the theory that *h. facialis* is a form of zoster, and Mauriac holds the same view with regard to *h. progenitalis*. In fact, von Baerensprung seemed to think that the first was an abortive form of zoster of the fifth pair, and the last a rudimentary zoster of the sacro-ischiadicus.

I believe, as I have said above, that it is nearer the truth to class together the *zosteroids* and *h. vulgaris*, both owning in all probability a similar pathology and both exhibiting the phenomena of recurrence, limitation to one nerve area, and frequently bilaterality, features foreign to true zoster.

True zoster, on the other hand, is a well-marked clinical and, we believe, pathological entity, pursuing a regular cyclical course and ending in speedy recovery; a disease which Erb is to all appearances right in viewing as a specific zymotic exanthem; one which, like them, confers immunity, the exceptions to this law being so few as hardly to merit consideration, and probably forming no larger proportion of the whole than can be found in any exanthem—variola, for example.

In fact, of the sixty-one cases here enumerated, perhaps only six are recurrences of true zoster.

Lesser,⁴⁶ however, seeks to account for the rarity of well-established recurrences of the so-called idiopathic form by the relative in-

frequency of the disease, and by the difficulty of fastening upon an individual the definite proof of the former existence of a disease which often leaves no characteristic trace, and which may have occurred many years anterior to the second attack; in other words, that its non-recurrence is only in appearance, "*nur eine Scheinbare sei.*"

His position, as has been seen, is not borne out by the researches reported in this paper.

Kaposi's gangrenous form is evidently a separate disease, the further elucidation of which must be left to the future.

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Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

241ST REGULAR MEETING, HELD ON TUESDAY EVENING, FEBRUARY 26, 1895.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Superficial Vascular Nævus treated by Electrolysis.—Presented by DR. C. W. ALLEN.

The patient was a young lady who had a superficial vascular nævus of congenital origin on the side of the neck. The lesion is being treated by means of superficial punctures with the electrolytic needle, under which it has improved very much in appearance.

DR. ALLEN also presented a baby upon whom he had performed an operation for the correction of the deformity produced by an abnormal protrusion

of the ears. On the one side he simply excised a portion of the skin, and then stitched the two edges of the wound together; on the opposite side he removed a section of the cartilage. In both instances the result obtained was very satisfactory. He also presented a young lady with a coal-mark on the nose, which is being treated by means of tattooing with glyceropapoid.

DR. DANIEL LEWIS said he had seen cases in which abnormal protrusion of the ears was corrected by continuous compression, although he regarded operation as the most desirable method of treatment. Compression, in order to succeed, must be continuously applied for a long period.

A Case of Disseminate Lupus Vulgaris.—Presented by DR. P. A. MORROW.

The patient was a girl, aged twenty-two years; one of seven children. Family history negative. When she was ten years old she had an attack of scarlet fever, and soon afterward an eruption appeared on the right side of the face, on the scalp above the left ear, on the left elbow, over the left buttock, on the back of the right thigh above the knee, and above the left ankle. Under the influence of scraping and cauterization all these lesions healed excepting those on the face and over the buttock. A year later the middle finger of the left hand became painful and swollen, followed by suppuration and the formation of sinuses, which remained open. When she entered St. Luke's Hospital, a year and a half later, the lesions on the face and buttock were still unhealed, the glands in the submaxillary, post-cervical, and axillary regions were enlarged and suppurating, and she had a large open sore on the dorsum of the left foot. These lesions were all scraped and cauterized. The lesions on the finger were treated for six months, and then the finger was amputated. She left the hospital with the lesions on the face and left side of neck unhealed. Four years later the glands under the jaw were again scraped out, resulting in a cure which thus far has been permanent. The lupus of the face was treated by repeated scarification, and, while greatly benefited, it was not cured. In November, 1894, when she first came under Dr. Morrow's observation, the scar on the face was covered by lupous nodules, with numerous tubercles developing at the periphery. Under the influence of punctate and linear igneous scarifications, followed by applications of mercurial plaster, the lesion has almost entirely disappeared.

DR. GEORGE H. FOX said that Dr. Morrow's case reminded him of one now under his observation, in which the greater portion of the face is covered by disseminated nodules. In these cases, where the lesions are isolated and deeply seated, he has found the use of the dental burr very efficacious. The galvano-cautery or scarification is out of the question, although both of these measures are extremely valuable when the lesions are diffuse. With the small dental burr you can go either partly or wholly through the corium, and by first dipping the burr in carbolic acid the tissues are anæsthetized, and some of the cells destroyed which are not reached mechanically.

DR. GEORGE T. JACKSON said that in disseminated lupus cases he had had good results by means of electrolysis with a rather coarse steel needle.

DR. ALLEN said he preferred linear quadrilateral scarifications and strong mercurial applications.

DR. JOHN A. FORDYCE said, when the lesions are diffuse he had obtained the best results by scraping them out, and then applying pyrogallie acid or using the galvanic cautery.

DR. L. DUNCAN BULKLEY said he had obtained good results by first scrap-

ing the nodules and then wiping out the cavities with pure carbolic acid. This produces a slight superficial slough.

DR. E. B. BRONSON said he had employed the dental burr in these cases with very satisfactory results.

DR. H. G. KLOTZ said that the case shown by Dr. Morrow was very interesting on account of the simultaneous appearance of lesions on several portions of the body and for its severity, as instances were rare where a finger is lost as the result of lupus. In treating cases of this character, the speaker said, he usually followed the method mentioned by Dr. Fordyce—i. e., scraping, followed by the application of pyrogallic acid or the cautery.

DR. MORROW said that he had tried the dental burr, as suggested by Dr. Fox, and found that method of treatment very painful, much more so than the igneous punctate applications. As a further objection to Dr. Fox's method of treatment, he had suggested that this disintegration of lupus tissue might be followed by the absorption of the bacilli into the general circulation. In treating a case of this kind, where the lesions are on the face, the cosmetic effect should also be borne in mind. In diffuse lesions he preferred quadrilateral scarifications. He presented this case not so much to display the effects of treatment as to show the extent and distribution of the lesions, which were somewhat rare.

DR. FOX said that some years ago he showed a case of lupus where the lesions covered the face and the entire thigh on one side. During the treatment of the lesions on the face, those on the thigh disappeared spontaneously.

DR. CONDUCT W. CUTLER said he recently saw a case of lupus nearly as extensive as that shown by Dr. Morrow. The lesions covered both eyelids and cheeks and the greater portion of the neck. There were also a few lesions on the thigh. The patient stated that about eighteen months ago he had a very destructive lesion on the finger, necessitating amputation.

DR. KLOTZ referred to a case of lupus presented to the society at its two hundred and twenty-sixth meeting. The lesions were on the forearm and back of the hand, and on the eyebrow.

A Case of Fragilitas Crinium.—Presented by DR. GEORGE T. JACKSON.

The patient was a female, aged twenty-eight years. The trouble with her scalp had existed for the past ten years. It came on during an attack of general prostration and profound anæmia, from which she suffered nine months. She never regained her usual health until the present winter. She has suffered from severe sick headaches, dysmenorrhœa, and more or less nervousness. Her hair has never been long, but was thick and hung down as far as the middle of the back. She has never been particularly troubled with dandruff. The hair has never fallen out in patches, or sufficiently to produce a bald spot. It grows out to about one or two inches in length, and then splits and breaks off. There is no appearance of keratosis. The scalp feels hide-bound to the patient. An inspection shows that the hair over the entire scalp is short, excepting a fringe around the lower border. The scalp appears to be normal. There also appears to be a normal number of hair follicles with hair in them.

DR. BRONSON said he recently had under his care a young unmarried woman with peculiar bald patches on the scalp. There was nothing in their appearance to suggest alopecia pityrodes. The follicles had atrophied here

and there, leaving the hair irregularly distributed. The bald patches had the same moth-eaten appearance which we get in syphilis, but there were no corroborative symptoms of that disease, and the lesions did not improve under specific treatment.

DR. S. LUSTGARTEN said that in Dr. Jackson's case the appearance of the hair was somewhat similar to that we see in cretinism and myxedema. The breaking off of the hair may be due to some trophic disturbance. He suggested the use of thyroid extract.

DR. BULKLEY said he had seen a number of cases similar to this one in nervous hysterical girls, and was always apt to suspect malingering. In one case under his observation the patient, a young woman, continually pulled at her hair while studying; this habit produced irregular bald patches, somewhat resembling ringworm.

DR. S. SHERWELL said he at first thought the case was one of malingering, but the appearance of the scalp was not healthy. The brittleness of the hair seems to be produced by the dryness of the scalp.

DR. KLOTZ said the skin appeared to be atrophic, and the prominence of the hair follicles might be due to shrinkage of the surrounding tissues. He regarded the condition as a neurotic one.

DR. JACKSON, in closing the discussion, said he did not think the patient was a malingerer. He rather suspected some neurotic disturbance. When she worried the condition got worse. The scalp appears to be abnormally dry.

Tubercular Syphilide of the Nose.—Presented by DR. FOX.

The patient was a young colored girl who had been an inmate of the Skin and Cancer Hospital for the past two months. She had an extensive fungating growth on the nose, which he regarded as a tubercular syphilide, although the case had been diagnosticated by others as one of lupus. It is possible that there is a mixed infection. Under the application of mercurial plaster it at first improved rapidly, but during the past few weeks it has been at a standstill. Dr. Fox said he had little doubt that the growth was of syphilitic origin. The patient is at present suffering from hospitalism, which may account for the fact that her condition has not continued to improve. It has existed about one year.

DR. JACKSON said he regarded the case as one of tubercular syphilide. It was rather remarkable to have so extensive a tubercular lesion develop in so short a time.

DR. SHERWELL said that from the marginal appearance of the lesion and the scaling on top he was inclined to regard the case as one of lupus. A similar case is now under his observation, although the history is of much longer duration. In that case he has employed the acid nitrate of mercury with very good effect.

DR. BULKLEY said he had watched the case at the hospital for three or four months, and has arrived at the conclusion that the lesion was a late syphilide. In many particulars it differed decidedly from lupus. Both the appearance of the growth and its rapid progress pointed to a syphilitic origin.

DR. CUTLER said he was inclined to regard the case as one of lupus. The atrophy of the tissues of the nose and lip at the margins of the growth pointed to that diagnosis, and its rapid progress would not necessarily be

against it. As regards the benefit that has been derived from specific treatment, it is well known that mercurial plaster has a decided effect on lupus in some cases, especially in those of rapid development.

DR. LUSTGARTEN said that from the present appearance of the lesion he regarded it as a case of lupus which did not show any unusual features.

DR. FORDYCE also pronounced the case one of lupus. The lupus nodules were at present very distinct.

DR. MORROW diagnosticated the case as one of lupus, atrophic in character. The only point against that diagnosis was the rapid development. The nibbled appearance of the alæ nasi was quite characteristic of lupus.

DR. A. R. ROBINSON regarded the case as one of lupus vulgaris. The margins of the growth were quite characteristic.

DR. ALLEN also pronounced the case one of lupus.

DR. KLOTZ said he thought the case was one of lupus. He suggested the use of tuberculin in order to clear up the diagnosis.

DR. FOX, in closing the discussion, said that so far as the location and configuration of the lesion were concerned, they pointed to either syphilis or lupus. It was certainly not a typical case of tubercular syphilide, and by no means of lupus. The rapid improvement which occurred under mercurial plaster when it was first applied strengthened his original diagnosis of tubercular syphilide. Then her general condition began to deteriorate and the lesion failed to continue to improve. The history of the case certainly pointed to syphilis. Dr. Fox said he intended to give the antisymphilitic treatment a thorough trial, and would report the result at a subsequent meeting. As regarded the possibility of mixed infection, he did not recollect ever having met with a case of syphilis and lupus combined.

DR. FORDYCE said that while the lesion on the cheek was certainly lupus, it was not at all unlikely that the fungating growth of the nares was due to a mixed infective process starting from within the nose.

A Case of Favus of the Body.—Presented by DR. FOX.

The patient was a Russian Pole who came to this country four years ago. About two years ago he had an attack of favus on the body, from which he apparently recovered under treatment. The patient was presented by Dr. Lustgarten at a previous meeting of the society. Recently he has had a relapse, and now has even more extensive favus crusts on the buttocks and thighs. The scalp has never been affected.

DR. LUSTGARTEN said his experience with favus of the body in this country had been very limited. In this location the affection was usually readily cured. He first employed some antiseptic and not very toxic wet application like thymol, liquor Burowi, etc., to soften the crusts, and when these were removed the patient was instructed to wash himself daily with green soap, and then apply salicylic-acid ointment. It is advisable to keep these patients under observation for a long time, even after they were apparently cured. While it was comparatively easy to cure favus of the body, it was very difficult to cure favus of the scalp.

DR. BRONSON said he had had very good results from cinnamic aldehyde, which he preferred to either the oil of cinnamon or the oil of cassia. He employed a five- or ten-per-cent solution. It appeared to have a germicidal effect, and made the favus disappear, at least temporarily.

DR. FOX said that after these patients were apparently cured it was a good

plan to instruct them to use hyposulphite of sodium in the form of a wash, and this should be kept up for a long time.

A Case for Diagnosis.—Presented by DR. ROBINSON.

The patient was a young man who about eight days ago noticed a sore on the lower lip, followed in two or three days by enlargement of the glands under the jaw. The sore on the lip felt hard to the touch; there was no erosion of the mucous membrane.

DRS. FOX and JACKSON diagnosticated the case as one of incipient chancre. Also Drs. Sherwell and Bulkley.

DR. ALLEN said he regarded the case as one of chancre of the lip, although there was not as much glandular enlargement as usually existed in these cases. If the diagnosis of chancre of the lip was fairly certain, specific treatment should be immediately commenced, without waiting for any eruption, because patients with an initial lesion in this location are a source of great danger to the community.

DRS. CUTLER, LUSTGARTEN, and BRONSON also pronounced the lesion a chancre. The latter stated, however, that it was very easy to be misled in some instances. A short time ago he saw a man with a circumscribed, indurated lesion on the lower lip, which had every appearance of an incipient chancre. There was, however, no glandular enlargement. A few days later the hardness was replaced by an abscess formation which discharged a quantity of pus and immediately disappeared.

DR. FORDYCE thought the lesion was a chancre. He agreed with Dr. Allen that treatment should, as a rule, be commenced as soon as the diagnosis was made, without waiting for secondary manifestations.

DRS. MORROW and KLOTZ agreed with the previous speakers. The latter said the fact should be borne in mind that abscesses may cause glandular enlargement.

DR. ROBINSON, in closing the discussion, said he had only seen the patient on one occasion. He regarded the lesion as a chancre. The patient was a married man, and claimed that he had not been exposed to venereal disease.

DR. KLOTZ called attention to the fact that with chancre of the lip it was often difficult to find the source of the infection. He has seen one case in a musician who probably was infected by using another man's instrument.

A Case of Lichen Planus.—Presented by DR. KLOTZ.

The patient was a man, aged sixty-two years. The eruption first appeared about two months ago. The case was of interest because of the extent and peculiar distribution of the lesions, and the fact that very few of the nodules really showed the conditions characteristic of lichen planus, as described in the books, but were rather small and pointed. Ordinarily, the favorite localities for lichen planus—the region of the waist, the neck, and the penis—were not involved, the eruption being confined to the back, abdomen, and the extremities.

DR. CUTLER referred to the beneficial effects of chlorate of potassium and dilute nitric acid in these cases, without any local treatment whatever. He has used it with excellent results in several cases which failed to yield to any other method of treatment. He usually gave fifteen grains of the chlorate of potassium after meals, and fifteen minims of dilute nitric acid before meals, three times daily.

DR. BULKLEY stated that he had also employed this method of treatment

with very remarkable results. In one case of lichen planus recently under his observation, where the lesions were confined to the hands, rapid improvement followed the use of the chlorate of potassium and dilute nitric acid.

A Case for Diagnosis.—Presented by DR. ROBINSON.

The patient was a man who eleven years ago began to suffer from an eruption on the forehead, which gradually extended in isolated spots over the entire body. The nails were affected in the very early stage of the disease. The eruption was somewhat itchy. The diagnosis, Dr. Robinson said, rested between psoriasis, pityriasis rubra, and eczema; personally, he rather favored the latter.

DR. LUSTGARTEN regarded the case as one of generalized exfoliative dermatitis. He did not see any resemblance to psoriasis. He referred to the long duration of the disease in this case.

DR. CUTLER thought the case was one of pityriasis rubra. He stated that about two years ago he saw a patient with psoriasis; the eruption, which was generalized, gradually became altered and assumed the appearance of a pityriasis rubra, as in this case. It was not uncommon, he said, to see cases in which the psoriatic features of the eruption were entirely masked.

DR. FREDERICK J. LEVISEUR said he saw this patient about two years ago and made a diagnosis of psoriasis. At that time he also had acne rosacea. Under arsenic the psoriatic lesions disappeared, but the acne persisted. There appeared to be a seborrhœal element in the case, and the speaker expressed the opinion that Unna's seborrhœal eczema, which is so similar to psoriasis, might be considered here. He did not think the case was one of pityriasis rubra.

DR. MORROW said he considered the case one of pityriasis rubra following psoriasis. Several such cases had come under his observation. In one the exfoliation was very abundant.

DR. BULKLEY said that many of the man's lesions on the face and about the knees and elbows were still very characteristic of psoriasis. He did not approve of the idea of applying the name pityriasis rubra to the eruption which developed after psoriasis; it was rather an exfoliative dermatitis.

DR. SHERWELL referred to a case similar to this one now under his observation, in which he is doubtful whether the diagnosis was pityriasis rubra or psoriasis or exfoliative dermatitis. His patient was a young girl who had had the eruption for eight years, more or less modified by treatment. The skin was exfoliated in large flakes. The nails were affected. The skin was not fissured.

DR. JACKSON diagnosticated Dr. Robinson's case as one of dermatitis exfoliativa following psoriasis. He thought it was better to reserve the term pityriasis rubra for Hebra's disease, which originated without a previous eczema or psoriasis, and which was a much more pronounced and fatal disease than this one.

DR. FOX said he agreed with Dr. Bulkley that this case now showed undoubted evidences of psoriasis, which probably existed for years. There is now a general dermatitis, which it is hardly proper to call dermatitis exfoliativa, because it was not accompanied by the exfoliation of large dry scales. It certainly should be kept distinct from pityriasis rubra.

DR. ROBINSON, in closing the discussion, said he was still rather doubtful regarding the correct diagnosis in this case. It was certainly not a case of

Hebra's pityriasis rubra. The man undoubtedly had a psoriasis some years ago. The dermatitis which now existed was not the ordinary dermatis exfoliativa, with the exfoliation of large scales. It was nothing but a form of dermatitis very superficial and catarrhal in character, and probably closely related to seborrhœal eczema.

A Case of Mycosis Fungoides.—DR. LEVEISEUR exhibited a photograph and drawing of this case. The patient was a woman, aged thirty-six years. The disease developed about four years ago. It commenced on the arm, then appeared on the lower extremities, and finally on the body. The lesions consist of red, elevated tumors, and on the left leg there is one large, fungating growth as big as a silver dollar. The patient's general health is fair, although she has a peculiar cachectic appearance. Examinations of her urine have proved negative. There is no increase in the white blood-corpuscles. She was given arsenic for a while, under the impression that the disease was psoriasis. At present she is on thyroid extract. He inquired whether inoculation with erysipelas toxines would be advisable.

DR. MORROW said that in some cases arsenic seemed to be beneficial.

DR. CUTLER suggested the use of a solution of bromide of arsenic and gold, taken together.

DR. LUSTGARTEN said that in one case of mycosis fungoides under his care he tried the toxines of erysipelas, but was compelled to desist because of the debilitated condition of his patient and alarming heart symptoms. He thought it was worth while to try this method of treatment. Arsenic gives only temporary benefit, and retards the course of the disease, except in very rare instances, where it is reported to have cured it.

DR. ROBINSON said he had had considerable experience with the erysipelas toxines, and, so far as epithelioma was concerned, the toxines were of no value whatever. He had never seen a case of epithelioma cured by this method. In a number of cases of sarcoma of the jaw, injections of strong solutions of the toxines produced only a temporary benefit. Many of these cases have been reported as favorable, while as a matter of fact the final result has been very unsatisfactory.

DR. FOX said he had thus far shown three cases of this disease before the society. In all of those cases the fatal prognosis made proved correct within a few months.

Correspondence.

IS TERTIARY SYPHILIS CONTAGIOUS?

Editor JOURNAL OF GENITO-URINARY AND CUTANEOUS DISEASES:

DEAR SIR: The following case, which came under my care some three or four months ago, I wish to report in detail, as I believe it proves that there are exceptions to all theories, no matter how sound they may be. On September 16, 1894, Mr. H. consulted me for several ulcers on the glans penis. From the history, appearance, and knowledge of the patient, I diagnosed herpes progenitalis, prescribing an astringent lotion. I did not again see him for five weeks or more, when he told me they disappeared immediately,

excepting at one point (near the frænum). This ulcer had no appearance of a chancre, no indurated glands, nor had any constitutional manifestations appeared. As he had been using bluestone freely, I thought that possible irritation from it had prevented healing. I ordered him to discontinue its use, and gave a dusting powder which closed it over in a few days. I did not see him again for three weeks, when he told me he had been sick with a severe cold, chills, fever, pains all over the body, and that a rash had appeared, but had gone away in a couple of days (not having any when I saw him). A week or ten days afterward it again appeared, only to disappear in a few days. This was repeated at an interval of four or five days, when I saw it by daylight and to myself diagnosticated a macular syphilide. He also had a sore throat for a day or so, but which rapidly got well under a few sprays of listerine. I must say I was confused, although suspecting syphilis from the day of chills, fever, and pain. I did not feel justified in communicating to him my suspicions, until a week later he appeared with hair falling out, mucous patches, and a well-marked macular eruption covering the chest and abdomen. Then I told him he had syphilis.

And now to explode the theory that syphilis is not transmissible after four or five years: I have known this man for ten years, seen him frequently, and positively know he never had anything except a gonorrhœa some three or four years ago. He also denies having intercourse in the past year with any but the woman I am about to describe. I have known her for two years and a half, she calling on me about that time, having nocturnal pains along the crest of tibia with swellings on the same (gummata), headaches, and the characteristic coloring of a past rupial eruption. There was no doubt about the diagnosis, she being relieved at once by iodide of potassium, mercury, and Fowler's solution. She vividly described to me a sore she had on the genitals (nine years previous), hair coming out, skin eruption, headaches, etc., and I am not in doubt but this was the infection. I can not doubt his word as being with no other woman in the past year, and she has certainly not had a second reinfection; but is it possible for syphilis to be contagious twelve years after the initial lesion? The woman denies having intercourse with any one else for a long time previous to the ulcers appearing. I have furthermore seen and asked her if she was sure about being with no one else, and she stoutly denies it. This woman at this late day, twelve years, is having active tertiary symptoms since writing. She complained of pain on defecation and a bloody muco-purulent discharge and tenesmus. Examination revealed a small ulcer internal to the inner sphincter.

J. HENRY DOWD, M. D.

Buffalo, N. Y., February 21, 1895.

Items.

Third International Congress of Dermatology.—To be held in London, August 4th to 8th, inclusive, 1896.

PRESIDENT.—Mr. Jonathan Hutchinson.

VICE-PRESIDENTS FOR THE UNITED STATES AND CANADA.—Dr. Duhring, of Philadelphia; Dr. White, of Boston; Dr. Nevins Hyde, of Chicago; Dr.

Bulkley, Dr. Keyes, and Dr. Fox, of New York; Dr. F. Shepherd, of Montreal; Dr. Graham, of Toronto.

TREASURER.—Mr. Malcolm Morris.

EXECUTIVE COUNCIL.—*Chairman*, Mr. Hutchinson; *Vice-Chairman*, Dr. Colcott Fox.

COMMITTEES.—*Reception*: Chairman, Dr. Radcliffe Crocker. *Museum and Demonstration*: Chairman, Dr. Stephen Mackenzie. *Bacteriological*: Chairman, Dr. Sims Woodhead.

SECRETARY FOR THE UNITED STATES.—Dr. George T. Jackson, 14 East Thirty-first Street, New York.

SECRETARY-GENERAL.—Dr. J. J. Pringle, 23 Lower Seymour Street, London, W.

REGULATIONS.

1. All duly qualified medical men, British or foreign, or others interested in science invited by the council, who shall have paid the fee of one pound sterling,* and who shall have enrolled themselves, shall be members of the congress and entitled to the volume of *Transactions*.

2. The official languages of the congress shall be English, French, and German, but, with the permission of the president, members may express themselves in the language with which they are most familiar.

3. The proceedings of the congress shall be embodied in a volume of *Transactions*, edited by the executive council.

4. Communications relative to membership, papers, or other matters connected with the congress, should be addressed to the secretary-general, Dr. J. J. Pringle, 23 Lower Seymour Street, London, W., or to one of the foreign secretaries.

5. The fee for membership shall be payable in London, at or before the opening of the congress. (It will greatly facilitate the work of the executive if the fee is forwarded as soon as possible after May 1, 1896.)

6. Members who are unable to attend the congress shall receive the volume of *Transactions*.

7. The subjects treated of shall be of two orders: 1. Those selected beforehand by the executive council, and introduced by gentlemen chosen for that purpose by the council. 2. Those selected by individual members themselves.

8. Subjects selected for debate by the council shall take precedence over those selected by the members.

9. The sittings of the congress shall take place from eleven to one in the forenoon and from three to five in the afternoon of each day.

10. There shall be clinical demonstrations of patients every morning from nine to half past ten, and every afternoon from two to three.

11. Members contributing papers must submit an abstract of them to the secretary-general on or before May 1, 1896, which will be printed either in full or in part, and embodied in the general programme of the congress which will be distributed at its opening.

* The equivalent of one pound sterling is—French, twenty-five francs; German, twenty marks; Italian, twenty-five lire; American, five dollars.

12. At every debate precedence will be given to gentlemen who have communicated beforehand their intention to take part in it.

13. No papers lasting more than twenty minutes will be permitted. Speeches will be strictly limited to ten minutes each. Manuscripts of the papers read must be left with the secretary-general before the end of the sitting. The executive council shall decide as to the entire or partial publication of such papers in the *Transactions* of the congress.

Daniel Danielssen.—The great physician and scientist who worked for more than fifty years in Bergen, and who was considered while living the greatest authority on leprosy, has died, aged seventy-nine years. His work, *Om Spedalskhed* (in collaboration with C. W. Boeck), has become common property; his humane efforts—in the Lungegaards Hospital and for the lepers of his whole country—are a shining example. His memory will always remain alive in the scientific world. It seems appropriate that physicians of all nations, to whom he has been so much, should unite to found a memorial for DANIEL DANIELSSEN!

Contributions are received by the undersigned:

E. BESNIER, Paris, 59 Boulevard Malesherbes.

R. CAMPANA, Rome.

A. DOYON, Uriage-Isère, France.

H. HALLOPEAU, Paris, 91 Boulevard Malesherbes.

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G. THIBIERGE, Paris, 7 Rue de Surène.

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J. ZEISLER, 125 State Street, Chicago.

DR. RANSOM'S CASE OF LUPUS VULGARIS.



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Original Communications.

OBSERVATIONS ON AN UNCOMMON FORM OF CUTANEOUS TUBERCULOSIS.*

By CHARLES C. RANSOM, M. D.,

Clinical Assistant to the Chair of Dermatology, College of Physicians and Surgery, New York; Visiting Physician to the City Hospital, New York; and

IRA VAN GIESON, M. D.,

Instructor in Normal Histology, College of Physicians and Surgeons, New York; Visiting Neurologist, Randall's Island Hospital; Curator to the City Hospital, New York.

IN December, 1892, the subject of this paper was first brought to me for treatment, and the case presented so many peculiar and unusual features that I deemed it of sufficient interest to report.

The patient, Kate R., aged nine years, is the fourth child and only daughter of a family of seven children, four of whom are still living and are strong and robust.

Of the three dead, one died of diphtheria; one from fracture of the skull, a result of accident; and the third at one and a half years of age from cerebro-spinal meningitis. The family history is as follows:

The maternal great-grandmother died of dropsy, cause unknown; the maternal great-grandfather died of apoplexy; the maternal grandfather died from chloral poisoning. The maternal grandmother is still living, is about sixty years of age, and, except for chronic rheumatism from which she is a great sufferer, is in good health. The mother is strong and hearty, and is able to do the housework and sewing for the entire family. The paternal grandfather died at an advanced age from some acute disease; was sick only a few days. The

* Read before the New York Society of Dermatology and Genito-Urinary Surgery.

paternal grandmother is still living and is nearly ninety years of age. She is a large woman and perfectly well. The father is a large, healthy man, weighing over two hundred pounds, and has never been sick.

The patient is a pale, thin child, who, the mother says, has always seemed more delicate than any of the other children, though she has never had any severe illness.

When I first saw her, in December, 1892, the mother gave the following history of the trouble :

About three months ago the child came in from play and complained of a lameness in the right arm. Upon examination the mother found a small lump in the right axilla, and at the same time noticed a small red pimple on the right side of the chest. The lump was somewhat tender on pressure, and the mother poulticed it for several days, and then took her to a physician, who ordered an ointment. The little pimple on the chest in the meantime grew larger, and soon other small spots appeared about the original lesion. They were in no way troublesome, there being absolutely no sensation of any kind accompanying them, and but for their unsightly appearance would never have been noticed. Gradually these spots disappeared and others came in the same place, the tendency being to increase in number.

Upon examination I found the condition as follows : On the upper part of the chest, about one inch above the level of the nipple and just on the right border of the sternum, is a more or less circular patch with irregular outline. (See colored plate.)

The center of the patch is somewhat depressed below the level of the surface, and has a smooth, glistening appearance like cicatricial tissue. The color of the center is faint red or purplish (a lavender tint like that of lichen planus). Around the border of the patch are groups of pinhead-sized papules in various stages of development and involution. The newer papules are slightly elevated and surmounted by a little whitish scale which is rather adherent. The color of the papules is a dark red, giving to the border of the patch a brownish-red color. The older papules when, looked at closely, have a yellowish-red color and seem to contain a yellowish fluid, but have not the characteristic apple-jelly appearance of the ordinary tubercle of lupus. Scattered about among these papules are isolated pits or cicatrices of the same character and color as the center of the patch. There are absolutely no subjective symptoms. In the right axilla is an enlarged gland about one inch in diameter, firm to the touch and without any tenderness. I ordered vaseline for a placebo and kept the case under observation throughout the winter. During this time many of the

papules disappeared and new ones developed at the periphery, some of them as far as half an inch from the original patch.

From my observation I concluded that the case must be one of cutaneous tuberculosis, but of a peculiar type, and my impressions were strengthened by the report of an unusual case of tuberculosis of the skin made by Dr. W. Dale James and Norman Walker, of Edinburgh, which was sent me by Dr. Walker about this time, in which many of the clinical features described were similar to my own case. In December, 1893, I excised a portion of the growth and submitted it to Dr. Ira Van Gieson for microscopical examination. In Dr. Van Gieson's report of this examination, as will be seen, he found many factors which made it impossible, from the microscopical examination alone to confirm the diagnosis of tuberculosis, and he suggested animal inoculation as a means of determining the point.

During the following summer (1894) the papules comprising the patch entirely disappeared, no new ones recurring; and about the same time the enlarged gland in the axilla softened and spontaneously ruptured. At the present writing (June, 1895) there has been no recurrence of either. On the site of the lesions there is a white, glistening, and smooth scar with small white cicatrices about the borders, the sites of the isolated lesions. The child is growing, and, while she is somewhat pale and delicate-looking, she seems to be perfectly well.

Dr. Van Gieson's Report of the Microscopic Examination and Inoculation Experiments.—The microscopical examination of the excised bit of skin left the question of diagnosis as determined solely by the structure of the tissue quite doubtful. The structure of these small nodules on the breast partook of the characters of both tuberculosis and syphilis in the form of miliary gummata. The minute structure of these little nodules was quite uniform in their various stages of development, but the picture under the microscope was not the classical one of miliary tubercles or the other phases of tuberculosis. These nodules in the excised portion were not only somewhat atypical structurally, but their grouping and distribution were rather different from the lesions of the ordinary cases of cutaneous tuberculosis. Thus, the nodules were deficient to a considerable extent in the usual elements of necrosis, diffuse tubercle tissue, vascular lesions, and secondary inflammations. Furthermore, their occurrence in more or less discrete masses, and their very superficial situation in the skin, complicated with the formation of tiny bullæ, made the grouping and arrangement of the nodules in the layers of the skin rather extraordinary and quite different from the usual forms of primary or secondary cutaneous tuberculosis.

The rather characteristic feature of primary tubercular lesions of the skin is the focal situation of the tubercular nodules; they are grouped together in a confluent mass, with more or less cheesy degeneration, diffuse tubercle tissue, surrounding exudative inflammation, so that a single ulcer of more or less extent results. The nodules in such cases also may be quite deeply situated. In a tubercular dactylitis, for instance, most of the nodules with their single or confluent cheesy areas may lie very deep in the thickness of the corium or subcutaneous connective tissue. Nodules of such uniform size, occurring so individually and superficially in the skin as in this instance, are certainly quite different from the ordinary run of cases, and the contrast between them and the lupous class of cases is too striking to need more than mere mention. Cutaneous tuberculosis distributed in this unusual way must be of rather infrequent occurrence; at least, no such case has come into this laboratory during its twenty years' existence. Finally, with the most patient searching, no tubercle bacilli could be demonstrated.

On the other hand, judging from their minute structure alone, the nodules in this case could not be distinguished from miliary gummata, such as are occasionally distributed through one or more organs.

Thus it will be seen that not a few factors made it very difficult, from microscopical examination alone, to pronounce these nodules, even with the clinical history, positively tubercular. The clinical features would incline the diagnosis by the microscope toward primary tuberculosis, for no history of hereditary or acquired syphilis could be obtained, and the single enlarged axillary gland on the same side seemed to be more suspicious of tuberculosis than syphilis.

In view of some of these unconventional features of the distribution of the nodules, as well as the structural difficulties in the way of a positive diagnosis, the case was thought to be an exceedingly practical one to settle the question by animal inoculation. Incidentally, Woodhead's article (*Journal of Pathology*, 1893) on the determination of doubtful cases of tuberculosis by animal inoculations, and Hodenpyl's observations (*Transactions of the New York Pathological Society*, 1893) on the differential diagnosis of miliary tubercles and gummata by the microscope, are of interest in this connection.

Accordingly, three guinea-pigs were inoculated from this patient, under strict antiseptic precautions, on May 22, 1894. A piece of skin about four millimetres in diameter containing two papules was excised from the breast; two of the pigs were inoculated in the middle of the belly, and a third in the belly with a portion of one papule and in the axilla with a portion of the second papule.

One of the guinea-pigs died sixteen days after the inoculation, with absolutely no traces of tuberculosis at the autopsy. The point of inoculation had completely healed and the organs were perfectly normal. The other two animals were killed forty-three days after inoculation, and both showed a pronounced development of general subacute tuberculosis. The lungs, spleen, and mesenteric glands were involved more or less extensively by yellowish cheesy nodules from one half to four millimetres in diameter. The bronchial glands and spleen were especially affected, the former being enormously enlarged and cheesy, and the latter was completely riddled with the yellowish, cheesy nodules. Microscopical examination demonstrated tubercle bacilli, in considerable numbers in these viscera and also in the liver. The kidneys and suprarenal bodies were normal. In one of the animals no trace of the point of inoculation could be found; in the other an ulcer with a soft, cheesy, partially encapsulated floor on the left side of the belly one inch below the ensiform cartilage marked the site of the inoculation.

Having confirmed the tubercular nature of the papules in this case by animal inoculations, we may go on with a more detailed description of their structure. Sections of the excised piece of skin show that the peculiar papules and vesicles are situated over tiny masses of tissue which have grown into the upper portions of the corium, and consist of giant cells surrounded by clusters of rather large polymorphous cells, which in turn are irregularly enveloped by groups of quite small round cells. Thus there are giant cells in the centers of the nodules; then come the polymorphous or epithelioid cells; and finally, at the periphery of the nodules, where the nodules abut against the surrounding skin structures, are the irregular clusters of small round cells. As has been noted before, the nodules are very uniformly situated, quite superficially (Figs. 1, 2); and, further, they show comparatively little tendency to become confluent or form masses of any considerable size. Fig. 1 gives a very good average idea of the isolated character and superficial situation of these nodules. There is almost an entire absence of necrosis or cheesy degeneration in the slightest degree in these nodules, and they simulate very perfectly the miliary gummata.

The drawings fail to show perfectly how these nodules depart somewhat from the classical structure of miliary tubercles; without employing the colors of the section it is exceedingly difficult to show this, or the way that the nodules coincide with the structure of miliary gummata.

The relation which these small nodules bear to the formation of the papules and vesicles described by the clinician is made plain by the study of two stages in the development of this process of inocula-

tion, shown in Figs. 1 and 2. The vesicles are formed by the progressive accumulation of an exudation, principally of serum, from the tubercular nodules, which lifts up the rete Malpighii from the corium, and distends it in the form of a little conical pouch of fluid. The source of the exudation and the direction it takes are readily understood if we consider the general sequence of events dependent upon the lodgment of tubercle bacilli in a tissue or organ. After the lodgment of the bacilli there are first mitosis and proliferation of the surrounding connective-tissue cells as an expression of the body substance of the bacilli acting as a chemical irritant. Then in the course of time occurs an exudative inflammation from vessels just outside the ball of pro-



FIG. 1.—An early stage of the formation of a vesicle produced by the miliary tubercles in the skin. One of the isolated miliary tubercles with its central giant cells, epithelioid cells, and irregular clusters of peripheral small round cells lies just beneath the rete Malpighii. The rete is elevated by a mass of fibrin and red blood-cells at *x x*.

liferated connective-tissue cells about the bacilli. An army of leucocytes comes forth with more or less fibrin, serum, and red blood-cells, and surrounds the young tubercles. But in this instance, the tubercles being surrounded and constrained by the dense wall of connective tissue in the corium, the exudation is directed toward the outlet of least resistance, and thrusts up the epidermis in the form of these vesicles.

An early stage of the vesicle formation is seen in Fig. 1. Here is one of the small isolated tubercles situated in the pars papillaris and upper corium, and just above the nodule the epidermis is slightly raised by a mass of exudation products. This exudation consists partly of fluid, but principally of red blood-cells, held in the meshes of



FIG. 2.—A final stage in the vesical formation. The epidermis is elevated in an abrupt cone above a cup-shaped disk (*c c*) of confluent miliary tubercles, and between the two is a mass of granular material (*b b*) or clear serum coagulated by the alcohol hardening. *a a*, clusters of desquamated oedematous degenerated rete cells soaked off in the serous contents of the vesicle. *f*, hair follicle. *e*, sweat glands. *d*, a more deeply situated miliary tubercle.

a fibrinous network. Beneath the layer of exudation at *xx* there is a very slight degeneration and indistinctness of the cells of the tubercle.

Later stages of vesicle formation take place in the same way, the exudation becomes more excessive, and the elevation of the compressed and stretched rete becomes correspondingly greater. A later, rather ultimate, stage of the vesicular formation is shown in Fig. 2. The skin is here involved by several miliary tubercles joined together in a single layer, which is still quite circumscribed and very superficially situated just beneath the epidermis.

The rete Malpighii, compressed, stretched, and partially degenerated, is raised up in an abrupt moundlike form of some considerable height (three fourths of a millimetre) by an excessive accumulation of fluid (*bb*) above the circumscribed bed of confluent miliary tubercles beneath (*cc*). Only extremely slight evidences of necrosis or cheesy transformation can be found in the bed of tubercular tissue beneath the vesicle. Thus it appears that the granular material (*bb*) pouching out the epidermis has not been furnished by the breaking down of the tubercular tissue, but that this material is a fluid exudation coagulated in the hardening medium (alcohol). The exudation here, then, seems to be of the same source and character as in the smaller vesicles in Fig. 1, except that it must have had a clear or pale appearance, for the fibrin and preponderance of red blood cells noted in the earlier vesicle are completely absent.

Joining the clinical aspects and pathological history of these papules and vesicles together, when miliary tubercles follow this particular mode of growth in the skin—viz., very superficial situation, scattered and circumscribed distribution, little tendency toward necrosis—the origin and course of development of the vesicle would seem to be somewhat as follows:

Shortly after the tubercle bacillus lodges in the skin there should be a tiny lump just beneath the epidermis. Later, after the element of exudation has come into play, as in the stage in Fig. 1, the nodule would become more prominent, a trifle raised, and reddish. A thin, transparent spot in the epidermis at the summit of the nodule should show the color of the red blood-cells in the exudation beneath. Thus the first stage of the vesicle would be produced by gradual augmentation of the exudation; then, with a decrease in red blood-cells and an increase in serum, a tiny, circumscribed, straw-colored or clear herpetiform blister would finally result and correspond with Fig. 2. Eventually, in the history of these vesicles, should they rupture or should the roof be removed, a minute raw depression would result, which in

healing should for some time leave a little scarred pit or pearly colored spot in the skin.

Very little can be said, however, about stages in the history of the papules beyond the phase of complete vesicle formation, as shown in Fig. 2, or about the healing processes, for the excised part has furnished hardly any material for such study.

In one or two places, however, the appearances in the sections might be regarded as indicative of the reparative process which takes place after the culmination of the vesicles. Fig. 3, for example, shows

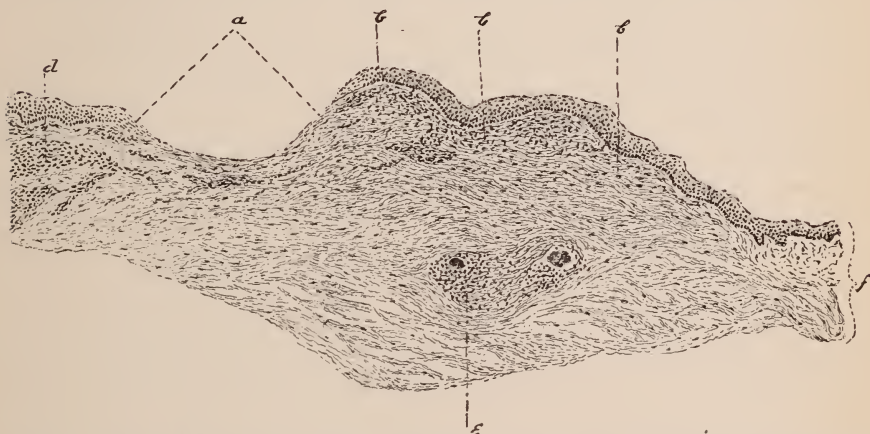


FIG. 3.—A section which shows a small depression, *a*, and beside it a thickened portion of the skin. The derma in both regions is changed into a denser structure, *b b b*. *d*, infiltration of elongated cells just beneath the rete Malpighii. *e*, atrophic tubercle. *f*, normal skin.

a little pit in the skin where the epidermis is either partially absent or has a thinned, desiccated, degenerated appearance, and the corium beneath is exceedingly compact and fibrous. In this changed corium beneath the pit the distinction between the loosely arranged upper papillary portion of the derma and the denser corium beneath, as in the normal skin at *f*, is entirely lost; the two layers of the corium are merged together in a single compact layer, not unlike some phases in the development of scar tissue. On the right of the pit (*b b b*) the whole substance of the corium is thickened, so that the surface of the skin is slightly elevated at this point, and the derma, except in its very lowermost strata, is again of quite dense structure, with the distinction between the papillary and lower derma obliterated. Just beneath the rete Malpighii the derma is infiltrated with irregular-shaped, mostly elongated cells (*b b b*). These cells seem to be proliferated connective-tissue cells, possibly fibroblasts producing, under a reparative rôle, new

connective tissue which has thickened this region. The same sort of cells are seen to the left of the pit at *d*.

Near the center of this thickened portion of the skin is a tubercular nodule consisting of two giant cells, each surrounded by a few small round cells. This particular nodule is quite different from the others; it is not so completely developed, it seems shrunken, the giant cells are degenerated and vacuolated, and altogether the impression is presented that the nodule is undergoing retrogression—that it is being walled in or replaced by connective tissue. This shrunken appearance of this particular nodule is not due to the contingency of its having been cut off the edge of a larger, well-developed mass, for nearly the same appearance is presented throughout a number of sections.

While the characters of such sections, as illustrated in Fig. 3, seem to indicate some stages of the healing process of the vesicles or the retrogression of the tubercles, it is possible that an entirely different explanation may account for these changes. The changes in this set of sections may possibly be of an artificial character. The operation of seizing the skin by forceps in the excision may have compressed the skin at *a*. The corium may have been squeezed together so as to present a very dense appearance under the microscope, and a portion of the compressed corium may also have been thrust out laterally so as to thicken and change the structure of the skin at *b b b*. In this way the increased density and obliteration of the upper and lower layers of the corium may possibly be accounted for. Similarly the tubercle at *e* may have been modified in its structure.

In view of such possibilities of artificial origin, and the limited material for study, nothing positive can be said of the reparative stages, or phases subsequent to the culmination of the vesicles in this case.

A final glance at Fig. 2 shows very graphically how readily tuberculosis might be acquired from these vesicles scattered about so superficially in a region of the skin. An exceedingly small portion of the papules sufficed to inoculate the guinea pigs. Yet such a patient is no more dangerous than the other tuberculous individuals who disseminate the disease through less tangible, more insidious channels.

Judging from the literature, very little seems to be known about this peculiar form of tuberculosis of the skin. It must be either of very rare occurrence, or is probably confused with other forms of cutaneous lesions.

The structure and distribution of these tubercles in the skin, although over a limited area are quite identical with the variety of tubercle in acute miliary tuberculosis. Yet, of course, the tubercles in this case

are in no wise a manifestation of acute miliary tuberculosis. The tubercles are simply of the miliary grade of size, and are scattered about discretely over the limited portion of the skin, and, being thus situated on the surface of the body, the inflammatory products associated with the tubercles seek an outlet on the surface of the skin in the vesicles or herpetiform elevations. It is also impossible in a single case like this to speak with any certainty about the source of the tubercle bacilli, or how they have traveled about in the skin to correspond to this occurrence of the miliary form of the tubercle and their distribution in discrete nodules, which is so contrary to the usual forms of cutaneous tuberculosis. It would seem, however, in this case that these nodules were of primary origin about the region of the nipple, for the child was perfectly healthy in other respects. The enlarged axillary gland of the same side might be regarded as secondarily infected from the nodules on the breast. Apparently the only other case described of this kind is reported by James and Walker (*An Unusual Case of Tuberculosis of the Skin*). In this case, a girl, nineteen years old, the minute nodules occurred in groups and traveled about, so that in the course of a year five different regions of the skin were involved. No mention is made of any signs of tuberculosis elsewhere than on the skin. The nodules were not uniform in all the different regions; a group on the cheek, about an inch and a half in diameter, had a deep purple tint, brownish toward the center. Under a magnifying glass this portion of the skin was involved by a series of soft, round, brownish-yellow nodules arranged in the shape of an oval ring. Some of the nodules had a minute white spot in them, as if they were minute cysts on the point of bursting. The eruption on the legs was rather different—the nodules were much larger and their surfaces very slightly depressed. On the forearms and hands the maculæ were of the chronic chilblain type. The group on the cheek seems quite identical with the collection of nodules on the breast described in our case. Nodules from the neck and just below the knee, in James and Walker's case, were examined microscopically. The several micro-photographs, however, illustrating the histological portion of the paper of these writers are so thoroughly unrecognizable that it is very difficult to obtain any clear conception of the rather diffuse and involved description of the histological examination.

By a process of exclusion Walker concludes that the nodules are tubercular, although somewhat atypical in structure. He was also unable to find tubercle bacilli in the sections. In looking over the literature the authors find their case almost unique, with the exception of the forms described by Leloir (*Journal des maladies cut. et syph.*, vol. ii,

p. 193) under the term lupoma. Leloir gave the name to a particular form of lupus, and furthermore distinguished varieties such as lupoma elevatum, planum, or sclerosis. In these cases of Leloir, James and Walker find the only coincidences with their own case.

SOME CONSIDERATIONS ON PROSTATECTOMY.*

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GRANTED that the operation of prostatectomy is indicated in certain cases, and that the views of McGill and others as to the anatomy, physiology, and pathology of the prostate, which justify the operation, are true as opposed to the older views of Thompson and Guyon, there are two lines along which personal experience and a careful study of the extensive literature of the subject have directed my attention: 1. The nature of the obstruction in prostatias. 2. The choice of operation for its relief.

As to the first consideration, opposing views were held by von Dittel and the late Mr. McGill. The first two propositions of the latter, in his paper at Leeds† in 1889, representing one extreme, are as follows: "1. Prostatic enlargements which give rise to urinary symptoms are intravesical and not rectal. 2. That retention is caused by a valve-like action of the intravesical prostate, the urethral orifice being closed more or less completely by the contraction of the bladder on its contents." According to McGill's views, the most essential element in this intravesical prostate is the hypertrophy of the so-called median lobe.

On the other hand, von Dittel,‡ although admitting the above to be occasionally true, claims that hypertrophy of the middle lobe happens very seldom without a high degree of enlargement of the lateral lobes. Although Moullin# claims that tables based upon museum specimens afford little assistance in determining the point of obstruction, yet, according to Eichenbrodt,|| the figures of Thompson, Civiale, and Du-

* Read before the Section on Genito-urinary Surgery, New York Academy of Medicine.

† *Brit. Med. Jour.*, Oct. 19, 1889.

‡ *Wiener klin. Woch.*, 1890, No. 18.

The Operative Treatment of Enlargement of the Prostate. London, 1892.

|| *Beiträge z. klin. Chir.*, 1891-'92, viii, 125-170.

puytren, put together, show the median portion prominently enlarged in only nineteen per cent. The claim that a general enlargement is present in most cases is well founded, and is confirmed by the observations of Desnos,* who found the median portion enlarged but twelve times in forty-seven cases; and of Vignard,† who found only twelve cases where there was any hypertrophy manifest at the level of the neck of the bladder among twenty-eight specimens in the Musée Civiale.

On the other hand, Watson‡ found among thirty specimens twenty-eight in which the principal hindrance was in outgrowths at the vesical outlet, and in ten this was the only hindrance.

The fact is well known that, though perhaps as many as thirty per cent of all men who reach fifty-four years of age and over have prostatic enlargement, not over fifty per cent of these suffer from the enlargement, and many of these only moderately. Does not this naturally suggest the question whether the various forms of enlargement are equally the cause of obstruction, and whether this minority of acute cases may not be due to some form of the enlargement which occurs only in a minority of cases, such as pronounced median-lobe hypertrophy or intravesical growth?

The important thing to know is which kind or kinds of enlargement cause such conditions and symptoms as call for radical operative relief. On examination of the recent literature of the subject we find that all varieties of opinion are held. Many agree with McGill's view that it is the minority of cases, comprising intravesical and median enlargement, that require operative relief.

Hurry Fenwick's# statement that ninety per cent of prostatic obstructions are due to middle-lobe enlargement is probably as much as McGill would have claimed for this lobe. Buckstone Browne|| says that, of the three forms of prostatic enlargement, (1) intravesical, (2) extravesical, and (3) a combination of both, the first, or intravesical form, is the chief cause of difficulty in micturition. In approving the advice of Browne not to touch the lateral lobes, J. Hutchinson^ says that it is the projecting and valvelike vesical lobe which alone constitutes the impediment. Kummel◇ is said to believe that tumorlike intravesical hypertrophy of the middle lobe is more common than is

* *Traité élém. d. mal. d. voies urin.* Paris, 1890, p. 309.

† *Ann. de mal. d. org. génito-urin.* Paris, 1890, viii, 649-683.

‡ *Annals of Surgery*, 1889, pp. 1-27.

Lancet, January 16, 1892, p. 141.

|| *Lancet*, 1893, vol. i, p. 527.

^ *Archiv. Surg.*, London, 1892-'93, p. 348.

◇ *Festschr. zum 70n Feiertag Fr. v. Esmarch*, 1893, 443-452.

generally supposed. Tobin * claims that reference to specimens shows that it is in cases where the median lobe is movable, and therefore removable, that retention of urine is most complete.

McGill's view would seem to be still further borne out by the case cited by him where an enormous prostate, filling the pelvis and causing obstruction of the bowels, gave rise to no urinary symptoms.

We might multiply quotations on this subject, but will only add that of Eigenbrodt,† who does not think that von Dittel's views as to the causative rôle of the lateral lobes are true to the extent of von Dittel's belief, for the operations described in the literature of the subject disprove them. He admits that in most cases the hypertrophy is a general but not a uniform one, and that tumorlike projections have a tendency to grow into the bladder, though pedunculated outgrowths from either lobe are generally admitted to be rare.

Accordingly, intravesical growths must generally be nonpedunculated. The forms of intravesical outgrowths, according to McGill, are (1) projecting middle lobe (pedunculated or sessile); (2) median and lateral lobes, forming three distinct projections; (3) lateral lobes; (4) pedunculated growths from the lateral lobe; and (5) uniform circular or collarlike projections surrounding the internal urethral orifice. The latter, in his earlier report,‡ McGill considered the most common, and in such forms the lateral lobes take part by their intravesical enlargement.

Belfield's # tabulation of sixty-three cases of prostatic obstruction operated upon shows that, as to the form and location of the enlargement, median tumors occurred thirty-seven times, lateral tumors nine times, median and lateral tumors five times, and collarlike enlargements seven times, etc.

It is certainly striking to note how often the so-called middle lobe is reported as enlarged, either alone or most prominently, and how often the removal of this part alone has been followed by a good result. The cases cited by McGill and some others, where the most aggravated type of symptoms of prostatic obstruction existed without rectal examination revealing any enlargement of the lateral lobes, must, I think, be most unusual; and the statement made by Moullin,|| and in substance by J. William White^ and others, that "the absence of any

* *Dublin Jour. Med. Sci.*, 1891, xcii, 497-500.

† *Loc. cit.*

‡ *Lancet*, February 4, 1888, p. 215.

Am. Jour. Med. Sci., November, 1890.

|| *Loc. cit.*

^ *Med. News*, Philadelphia, 1890, vol. li, December 12, p. 628.

enlargement when the gland is merely explored *per rectum* is not of the slightest value as regards its extension in other directions," is, I think, an exaggeration, and only correct so far as concerns the few and rare cases where a pedunculated or isolated median-lobe enlargement occurs. For I can not imagine any significant hypertrophy of the lateral lobes without being able to feel them through the rectum—in which direction, as well as intravesically, they grow most readily.

It must be admitted, I think, that the "median portion" may occasionally cause obstruction with little or no assistance from the lateral lobes. Von Dittel himself acknowledged this to be true, though very rarely.

We may discuss the question before us in three parts :

1. What is the evidence that an isolated enlargement of the median lobe is not so important a factor as some would have us believe? Von Dittel thinks that this is furnished by clinical and anatomical observation and by experiment. Eigenbrodt * remarks that the cases of outspoken formation of a "middle lobe" are not the most frequent, and he quotes Busch † as saying that valvelike "middle lobes" exist but are rare. Moullin ‡ expresses it as follows: "Occasionally, but not nearly as often as is usually believed, a small median outgrowth acting like a valve is found at the neck of the bladder, almost by itself, the rest of the gland being practically normal."

Furthermore, the results of operations where the middle lobe alone has been removed do not harmonize as they should, if the middle lobe or even the intravesical portion were the only factor. Thus M. Schmidt, § after a suprapubic prostatectomy of the middle lobe without result, was obliged to make a median perineal section, remove the urethral obstruction piecemeal, dilate the urethra, and use a stationary catheter; and only after further dilatation of the prostatic urethra was spontaneous urination effected. The failure of operations directed to the removal of the median portion alone was what led me to try von Dittel's operation in the case I have to report. As White || says, in a number of cases (Schmidt, Guyon, McGill, Belfield, etc.), obstruction due to sub-urethral prostatic growths has been found which has led to the "combined operation," together with stretching the prostatic urethra, as advocated by Belfield. The observation has been made by von Dittel ^ that in anatomical preparations of isolated middle lobes the changes caused by retention—i. e., hypertrophy, dilatation, trabeculæ, and diverticula—are found but little developed, which justi-

* *Archiv f. klin. Chir.*, xx, 461.

† *Loc. cit.*

‡ *Loc. cit.*

§ Quoted by von Dittel, *loc. cit.*

|| *Annals of Surgery*, August, 1893, p. 179.

^ *Loc. cit.*

fies the opinion that the urinary difficulty during life did not reach the degree requiring operation in preference. This would indicate that enlargement of the median lobe alone does not necessarily cause acute or obstinate obstruction, though we know, as before stated, that it may do so. Von Dittel's third experiment, described later, also goes to show that something besides the median lobe causes obstruction.

On the whole it seems evident that the median lobe is not the only factor, or even as important a one in prostatic obstruction as is claimed by many. Granting this, we may question—

2. Is the intravesical growth alone of the median and lateral lobes accountable for all the trouble in prostatic obstruction which it is sought to remove by operation? This is answered in the negative: firstly, by what has been said as to the median lobe, for obstruction due to it is almost entirely intravesical; secondly, by what will be said in favor of the importance of the lateral lobes, which cause obstruction largely by lateral compression extravasically.

Although in the majority of cases operated upon and reported it is noticeable that intravesical growths of the prostate did occur, yet one would expect some such appearance in almost any obstructive enlargement of the prostate; for, from its anatomical relations with the deep perineal fascia and the pubic bones, little downward or forward projection of the prostate is possible. It extends where there is the least resistance—i. e., upward or intravesically and backward toward the rectum. This fact we are all familiar with from the results of rectal palpation. The upward growth of the lateral lobes, as Moullin says,* “carries the bladder before it,” and it may be completed posteriorly by a median upgrowth or by a connecting fold of mucous membrane. In either case a so-called post-prostatic pouch exists which, when once formed, is deepened by the hydraulic pressure of the bladder, thus exposing more and more of the posterior surface of the median portion. This may account for the apparently more rapid growth of the median portion, and in many cases where a median intravesical hypertrophy is reported I imagine that it is simply the result of the exposure of this part by the pouch behind a collarlike projection connecting the lateral lobes. As Wishard † points out, McGill's proposition that “prostatic enlargements which give rise to symptoms are intravesical” does not appear to hold good in all instances, although generally correct. But, as he says, “it is certainly also true that in cases with hypertrophied

* *Annals of Surgery*, August 1893, p. 179.

† *Journal Cutaneous and Genito-urinary Diseases*, 1892, p. 105.

tissue projecting into the prostatic canal such enlargements may not only be the cause of urethral and vesical irritation but also interfere seriously with the introduction of instruments."

Belfield * also states that "the intravesical projections may in a given case constitute but a part of the prostatic obstruction."

That intravesical prostatic outgrowths may be a frequent or even the most frequent cause of vesical obstruction can not be denied, but it is no less true that they are by no means the only cause of such obstruction.

This being granted, we may ask: 3. What evidence is there that the lateral lobes, and especially their extravescical portion, are of importance in causing obstruction. That the lateral lobes may and do cause obstruction extravescically is clearly shown by experience and experiment. Most surgeons are familiar with the force that is often required to squeeze the finger into the bladder past the enlarged lateral lobes after perineal cystotomy. This is one reason for the stretching of the prostatic urethra employed and advised by Bangs, Belfield, Harrison, Schmidt, and others.

One need only examine, says von Dittel,† an anatomical preparation with bilateral prostatic hypertrophy to see how the lateral lobes press against one another by their opposed convexities, and so form a narrowing of the passage causing obstruction and retention.

Von Dittel's‡ interesting and instructive experiments, which led to his proposed "lateral prostatectomy," go to prove the importance of the lateral lobes, especially their extravescical portions. After finding that a wax bougie left twenty-four hours in the prostatic urethra was compressed laterally by an enlarged prostate, he experimented in cases with and without prostatic enlargement, and with the organs in position as well as after removal from the body, by introducing water into the bladder near the apex and noting the resulting outflow with the organs in the upright position: (1) With a normal prostate the water flowed away completely in a short time. (2) When bilateral hypertrophy existed the water flowed away only partly when the bladder was filled under strong hydrostatic pressure, leaving about thirty per cent of residual water. Residual water remained after a vertical median prostatectomy was done, but all the fluid flowed away promptly when the lateral lobes were resected from the exterior. With the organs *in situ* the same result was obtained.

3. In a case of general hypertrophy of the prostate the median portion was cut out as a wedge-shaped piece, but a slow and incom-

* *American Journal of Medical Sciences*, November, 1890. † *Loc. cit.* ‡ *Loc. cit.*

plete emptying of the bladder resulted until a wedge-shaped piece was cut out of both lateral lobes, whereupon the bladder promptly emptied itself. Not even von Dittel claimed that such experiments reproduce exactly the conditions as they exist during life; but the hydrostatic force used is the same as that which, according to McGill, causes retention of urine in cases of intravesical prostatic enlargement, and it is also the same force which empties the bladder during life, and, as in the latter case, becomes weaker as the bladder is more nearly empty.

The recent literature of the subject shows that many, if not most, have been compelled to recognize the importance of the lateral lobes as factors in the case. Thus McGill has removed a considerable amount of the extravescical portion; Keyes * reports removing the lateral lobes as far as one half of the length of the prostate downward and forward; and the present practice, in this city at least, seems to be to shell out the entire prostate as far as possible. Eigenbrodt † and Schmid ‡ both admit that hypertrophy and pressure of the lateral lobes is one of the causes of prostatic obstruction. According to J. William White, § by this lateral pressure, when the enlargement affects chiefly the lateral lobes, "the urethra is narrowed and compressed and the condition is analogous to organic stricture." In advocating the combined operation Belfield || says that by this means "not only the salient middle lobes, but also the no less obstructing though less obtrusive lateral enlargements are easily removable." Moulin ^ expresses it still more forcibly when he says, "The lateral lobes, when they are much enlarged, are quite as important as the median part, and require in most cases to be dealt with as thoroughly if permanent cure is the object." Also, elsewhere ¶ he remarks, "Yet in a large proportion of cases they (the lateral lobes), and not the so-called median lobe, are the real offenders." And, again, in describing a case, he says: † "Here the lateral lobes were the offending structures. . . . The chief difficulty, if not the whole, was due to the way in which the increase in their thickness had compressed the urethra into a narrow slit, through which it was not easy to force the finger."

The very fact that the three operations of "lateral prostatectomy" performed and reported by Küster ‡ were so successful shows not only the practical importance of the lateral lobes, but also the functional results which may follow their removal. In the face of all this evi-

* *Journal of Cutaneous and Genito-urinary Diseases*, 1892, p. 323.

† *Loc. cit.*

‡ *Festschrift zur 70. Feiertag Fr. von Esmarch*, 1893, pp. 443-452.

§ *Annals of Surgery*, xviii, 1893, 152.

|| *Loc. cit.*

^ *Loc. cit.*

¶ *London Lancet*, 1892, pp. 1380-1382.

† *Lancet*, July 16, 1892, p. 142.

‡ *Archiv f. klin. Chir.*, Bd. xlii, p. 859.

dence we can not doubt the importance of the extravescical portion of the lateral lobes as a factor in prostatic obstruction, by means of its compression.

To sum up, I think the following conclusions are justified :

1. That intravesical prostatic growth is not always, though perhaps most often, the cause of obstruction requiring operative relief.
2. That in such cases the median portion plays a most important part by forming a valve in the majority of cases.
3. That the lateral lobes are often important factors, both intra- and extravescically, but especially in the latter manner.

The above conclusions must be borne in mind, as well as the following requirements of the operation, as having a most important bearing on the

Second Consideration.—The choice of operation.

The requirements of the operation vary according to differing standpoints of different writers. McGill * states, and every one will agree, that to be effective the operation should (1) “for a time thoroughly drain the bladder, and (2) permanently remove the cause of the obstruction.” According to Belfield,† the operation should secure three results: (1) A low level route, (2) a temporary drainage, and (3) stretching of the prostatic urethra. This is essentially indorsed by Keyes, White, and others. Moullin‡ would add to the above requirements the removal of enough of the lateral lobes to convert the urethral slit into a funnel-shaped passage, as well as the removal of the entire intravesical mass, if the operation is to be successful. The latter requirement is questioned by many.

Before discussing the operation I would indorse Moullin’s# statement that “one form of obstruction can be dealt with most easily through the perineum, another supra pubes,” or Wishard’s || statement that “. . . neither of these operations is suitable to all cases, and that both may be required.” In comparing the relative claims of the suprapubic and perineal methods, including under the latter von Dittel’s “lateral prostatectomy,” we will consider (1) their advantages, (2) how they fulfill the above requirements and the considerations as to the importance of the lateral lobes, and (3) their disadvantages or objections.

The choice of operation is made less free by the uncertainty of diagnosis, which is taken by many as an indication to do a suprapubic

* *British Medical Journal*, Oct. 19, 1889.

† *American Journal of Medical Sciences*, November, 1890, p. 439.

‡ *Loc. cit.*

Lancet, 1882, ii, pp. 1380-1382.

|| *Transactions Indiana State Medical Society*, 1892, p. 215.

operation in all cases, for it admits of digital and ocular examination, and therefore accurate diagnosis with few exceptions.

McGill * claimed that his two requirements are best fulfilled by a suprapubic operation, because (1) it is more generally applicable, (2) it can be performed with greater precision and completed with greater certainty, (3) it insures complete and most efficient drainage, and (4) it is equally safe.

Most writers† agree that the suprapubic route is that of "election," as Tuffier ‡ remarks, and that by means of it the hypertrophied prostate can be most easily felt, seen, diagnosticated, and operated upon. The results obtained are better and more uniform than are those by other methods, and, as Eigenbrodt # says, these results will improve by perfecting the technique. If we believed with Buckstone Browne || that "no good would come of trying to remove the lateral lobes," or questioned with Eigenbrodt ^ whether it is possible to do a real radical operation with good results in cases of hypertrophy of the lateral lobes, there would be less choice of operation; *sectio alta*, or some modification of it, would be the operation, except where that is admitted by all to be contraindicated. But the feasibility of enucleating a large part of the lateral lobes has been demonstrated in a number of cases. "On several occasions," says Moullin, ◇ "McGill removed as much as two ounces in weight from the sides alone" through the suprapubic incision, and in this he has been followed, among others, by Belfield, Moullin, White, and Keyes.

(To be continued.)

ON SOME AFFECTIONS OF THE NERVOUS SYSTEM OCCURRING IN THE EARLY AND LATE STAGES OF ACQUIRED SYPHILIS.

By JOSEPH COLLINS, M. D.,

Visiting Physician to the Hospital for Nervous Diseases; Attending Physician to St. Mark's Hospital.

[CONTINUED FROM PAGE 247.]

THE cranial nerves show the sinister effects of syphilis more frequently than any other nerves of the body; and of the cranial nerves the third, or motor oculi, is by far the one most often affected. In fact, affection of the third nerve may be considered

* *British Medical Journal*, October 19, 1889, p. 863.

† See Gervais de Rouville, *Gazette des hôpitaux*, Paris, 1893, p. 629, and Chance, *Medical Press and Circular*, January 3, 1894, p. 3.

‡ *Bull. et mém. de la Soc. de chir. de Paris*, 1892, xviii, p. 842.

Loc. cit.

|| *Loc. cit.*

^ *Loc. cit.*

◇ *Loc. cit.*

one of the most frequent symptoms of syphilis of the nervous system. The lesion may be either of the nucleus or of the trunk. When of the latter, all the muscles supplied by the nerve are apt to be paretic; while if the involvement be of the nucleus, the latter is so extensive (no less than seven groups of cells, part at the base of the third ventricle, part in the aqueduct of Sylvius going to make it up), and has its origin in such a large area, that only some of the muscles may be involved. The extensive course of the nerve within the cranial cavity after its origin in front of the pons to the point of its emergence through the sphenoidal fissure lays it open to involvement secondary to affections of the membranes, such as compression by a syphilitic gumma or by localized spots of meningitis syphilitica. When the paralysis is nuclear in origin the lesion is probably either a syphilitic ependymitis or a syphilitic disease of the blood-vessels supplying the nucleus in its various parts. On account of the different sources of the blood supply of the different portions of the nucleus, disease of different blood-vessels will cause paralysis of the internal groups of muscles in one instance, and in another paralysis of the outer group.

When the area of disease is situated within the cerebral peduncles the resulting symptoms will depend entirely on the extent and nature of the lesion. If it is at all extensive, most of the branches going to one eye will be involved, and with this will be associated symptoms pointing to involvement of the pyramidal tract, either an irritation or partial destruction of some of its fibers. When the nerve trunk is involved as it passes along the floor of the skull, naturally the symptoms will depend upon the amount of the involvement of the trunk. When the lesion is extensive, both trunks are involved, and the result is a total paralysis of all the muscles supplied by the nerve on both sides. Such a condition is well illustrated by the following case, which was seen with Dr. Kalish in the City Hospital. The history may be summarized as follows: Patient, thirty-seven years old, says that three months ago she went to bed one evening, the eyes all right; awakened the next morning to find that she could not raise the lid of the right eye, and when she raised it with the finger she noticed that the pupil was large and that the eye turned outward. This continued for some days, when the left eye became affected in a way entirely similar. Inquiry into her history showed that the only complaint that she had made previous to the paralysis of these nerves was of headache and occasional diplopia. Examination failed to reveal any other symptom or evidence of nervous disease except hemianopsia. The patient at first strenuously denied syphilitic infection, but afterward confessed to a sore about thirteen months previously. The patient had begun to improve under

specific treatment when she left the hospital. The accompanying photographs illustrate the conditions: (Fig. 1) On trying to open the eyes voluntarily, and (Fig. 2) with the lids held open. That the lesion here was a basal syphilitic meningitis there can be no doubt. The



FIG 1.

other nerves of the eyeball are rarely involved from syphilis, and merit no particular description. Next after the third nerve the second and seventh are most frequently diseased as the result of syphilis, and sometimes this is seen very soon after infection, even as early as the third month. (Boix, *Archiv. gén. de méd.*, February, 1894.)

Paralysis of the sixth pair of cranial nerves depending upon ancient syphilis may be considered a rarity. Lamy (*Nouv. icon. de la Salpêtrière*, No. 2, p. 104, 1894) has recently reported such an occurrence associated with syphilitic cervical pachymeningitis in a patient who had been infected twelve years previously.

A very striking example of the effects of syphilis on the peripheral nerves is shown by a case recently published by Jacobsohn, in which there was multiple paralysis of the cranial nerves (*Centralbl. für in-*

nere Med., March 2, 1895). A man, aged twenty-nine, began to cough three months after the appearance of a hard chancre. Three months later signs of cavities were discovered in the lungs, but no tubercle bacilli could be found in the sputum. After four weeks a trigeminal neuralgia set in which was quickly followed by a double facial paralysis, all of which began to disappear quickly under antisyphilitic treatment.

Affections of the eleventh and twelfth pairs of nerves are most infrequent, and are always associated with syphilitic cervical pachymeningitis. Remak has reported a case (*Deutsch. med. Wochenschr.*, 1885, No. 27) in which there was involvement of both spinal accessory nerves, the result of syphilitic pachymeningitis, with paralysis and atrophy of all the muscles supplied by these nerves. When the twelfth nerve is involved the first symptoms are disturbances of speech de-



FIG. 2.

pendent upon defective motility of the tongue, which is the result of atrophy.

Peripheral neuritis of syphilitic origin is extremely rare, and we can here only refer to a few observations which go to show that it does

occasionally occur as one of the early symptoms of syphilis. Ehrmann (*Wiener med. Wochenschr.*, 1893, No. 933) has reported two cases, one in a thirty-eight-year-old man, who eight months after infection developed paræsthesia in the area of the ulnar nerve. The nerve itself was somewhat thickened, and in its entire course very sensitive to pressure. The interossei muscles, as well as the other small muscles of the hand, were atrophic in a high degree. On the inner side of the forearm there was hyperæsthesia, which limited itself to the distribution of the inferior cutaneous nerve in the arm and to the distribution of the ulnar and middle cutaneous in the hand. In the entire hyperæsthetic area there remained after each needle prick a blotch. The symptoms disappeared under antisypilitic treatment.

True neuralgia is one of the rarest complications or sequelæ of early or late syphilis. Pain, such as cephalalgia, rhachialgia, or even pain limited to the course of a single nerve, is not an uncommon symptom, but for such pain some gross anatomical change can often be found. Neuralgia is used here in the sense of pain not dependent upon gross structural change to account for it, and therefore such pains as those just mentioned are not in this sense neuralgia. Nevertheless, there occur in syphilitic subjects pains without detectable anatomical lesion which baffle all forms of treatment except antisypilitic, but to the latter they frequently respond. Anderson (*Brit. Journal of Derm.*, May, 1891) gives the history of a patient with a tertiary serpiginous syphilide which was associated with discoloration of the hair and eyebrows and severe neuralgic pain. Such pains might with propriety be called pseudo-neuralgic, for in true neuralgia pressure on the nerve exacerbates the pain, but in these we are considering it does not. One or two illustrative cases may be quoted here. A thirty-year-old waiter had complained for more than a year of pain starting from the groin, going down the back of the left thigh to the leg, and then down outside of the leg to the foot, where it diffused itself over the entire dorsal surface. With this he had a considerable pain in the chest. The pain in the leg had been getting gradually worse, so that he was now entirely unable to work. It was far worse by night than by day; it was not at all influenced by cold or damp weather. There were no points of tenderness such as are found in the ordinary case of sciatica, which, by the way, is almost always sciatic neuritis. Sensibility was normal; electrical reactions were unaltered. The patient had a chancre which "went through the blood" two years ago. He had received the most elaborate anti-rheumatic and other forms of treatment frequently employed in sciatica without benefit; in fact, he got gradually worse. Under increasing doses of iodide of potassium administered at the same time

with the protiodide of mercury the patient was free from pain in about three weeks.

It is my own belief that in such cases as the above an arterio-capillary fibrosis, which may be syphilitic in origin, is responsible for the pain, and that iodide of potassium and mercury when properly administered are both most potent measures in the amelioration of the arterio-capillary degeneration. I am the more ready to take this view, because experience has taught me the added efficacy of iodide of potassium if it is combined with small doses of nitroglycerin in these cases. Syphilis, by causing marked structural change in the large arteries, which may or may not result in aneurism, is another way by which it causes neuralgia. This statement is verified by a striking instance reported by Romberg, in which aneurism of the internal carotid caused trigeminal neuralgia. Obolensky (*Berl. klin. Wochenschr.*, Nos. 7 and 8, 1894) has related a case of neuralgia syphilitica dependent on aortic insufficiency and aneurism of the arch of the aorta syphilitic in origin, in which pain in the side and chest, extending from the first to the seventh intercostal space of both sides, was progressive in severity and unyielding to every form of treatment, including potassium iodide. When mercury was administered the symptoms began to disappear quickly. Neuralgia of the type of *tic douloureux* may be the result of syphilitic infiltration of the meninges at the place where the fifth nerve escapes from the base of the skull, but the most common form of pain occurring after syphilis is syphilitic cephalalgia, which is not dependent upon gross anatomical lesion, but upon a neuralgia of those branches of the fifth nerve which ramify in the meninges. This form of neuralgia is apt to be an early manifestation of syphilis—that is, within the first two years—and it is particularly amenable to specific treatment.

Anæsthesia in the distribution of the first branch of the fifth nerve, particularly if it be associated with mydriasis, was considered by von Graefe to be very significant of syphilis. A large number of cases of chronic trigeminal neuralgia in syphilitic subjects which had yielded to treatment have been reported, among them three cases by Seguin (*Archiv. of Med.*, 1881) and others by Walker (*Archiv. of Med.*).

Aside from these, neuralgic pains in the distribution of branches of the cervical, brachial, and lumbar plexuses and the intercostal nerves is the expression of encroachment upon such branches by a gummatous formation arising from the blood-vessels. These pains have to be distinguished from the pains of tabes, meningitis syphilitica, tumors of the spinal cord, etc.

A form of claudication has been described by Charcot which is almost always associated with syphilitic disease of the blood-vessels.

The lameness is intermittent and most frequently of the lower extremities, and is the result of an obstruction to the circulation in certain muscles, groups of muscles, or the nerves innervating these muscles. The claudication is merely symptomatic of the changes in the vessels. Clinically it is analogous to some forms of myasthenia.

The convulsive type of disease dependent upon syphilis of the nervous system is represented by some forms of epilepsy. The form which the epilepsy takes depends, as do all the other manifestations of syphilis, on the pathological product at the bottom of it and upon the seat of the lesion. Clinically the epilepsy may be symptomatic or what is called organic—that is, in the first instance, the lesion is such that a spasm of the Jacksonian type occurs, and this indicates a more or less localized lesion in some part of the cerebral motor tract, usually of the cortex. This form of epilepsy is usually an early syphilitic manifestation, and its most striking feature next to its clinical phenomena is its response to antisiphilitic treatment. It is seen in early adult life most frequently, and is distinguished clinically from other forms of epilepsy, syphilitic or nonsyphilitic, by its association with certain cerebral phenomena at its beginning and during its evolution, which shows its dependence on a specific encephalopathy. These phenomena are cephalalgia, hebetude, even reaching stupor and coma, optic neuritis, and even localized paralysis. Depending upon the seat of the lesion and its pathological nature—i. e., whether a lepto-meningitis or a gumma—there will be disturbances indicating involvement of specially endowed areas of the cortex or subcortical regions of the brain. When the cortex and meninges alone are the seat of the lesion, the attending symptoms will be those mentioned above, combined with an aura and other disturbances referred to the special senses, such as hemianopsia, anosmia, hypergeusia, speech disturbances, etc. If the lesion be a gumma and cortico-subcortical, any of these symptoms associated with others due to increased intracranial pressure may be present. To show the evolution of the clinical features of a case of this kind, and at the same time to point out the necessity of making a diagnosis without a history of the initial lesion, I shall give some details of a case which has been for the past three years under my observation.

F. J. D., twenty-six years old; an American of Irish parentage. There is nothing of importance in the family or personal history. He is industrious and sober, and gives no history or external manifestations of syphilis. During childhood he had the common exanthemata, but no bad results followed any of them. In July, 1891, he began to have headaches, pains all over the head, worse in the occipital region, and a feeling like a band or stiffness down the back of the head and neck.

These headaches would occur at any time, but were worse at night. One day, some time after he first noticed the headache, he was reading to his father; he stopped suddenly and said, "I think I'll go out and get you a cigar"; then his head fell back against the chair, and after a few moments he went on reading again. He did not remember anything of the occurrence. His mother asserts that he did not foam at the mouth or bite his tongue, but she is sure that he lost consciousness. When questioned about the attack he says he had no warning that it was coming on, nor does he remember anything that happened that day with distinctness—that is, he was in a dazed condition for a considerable time. After this the headaches continued. They were present every morning on arising, they continued during the day, and were most severe during the night. Although he was under treatment for the headaches by his family physician, and took the usual analgesics, this had no effect on the pain. In September he had another attack while in business. His fellow-clerks say that he became unconscious, the eyes bulged, and that the face became suffused. The next day I saw him for the first time. He was a well-nourished, muscular young man, who seemed to be in good health except for the pain in the head. Careful examination of his body failed to reveal any departure from the normal. Examination of the eyes showed 3 D. hypermetropia, and with the ophthalmoscope a moderate degree of papillitis, which Dr. Valk, who made the examination, believed was due to some intracranial trouble. There was no disturbance of gait, no local paralysis, no history of persistent nausea or vomiting. The patient was put on twenty grains each of potassium bromide and iodide, to be taken four times daily. Two weeks later he noticed considerable improvement. The potassium bromide was then diminished, and the iodide increased to thirty grains at each dose. Two weeks later the patient reported that he had had no headache or weakness since last seen. The bromide was then discontinued and the iodide given one hundred grains daily. A month later the patient reported that he was all right.

Examination of the eyes by Dr. W. A. Holden showed that the papillitis, well marked, still continued. The patient was seen occasionally for the next six months while taking the iodide, and he continued well. In the following autumn, after returning to practice from a six months' absence, one of the first patients seen was this young man, who told me that several months before, after having been free from the headaches for nearly a year, he stopped taking the medicine, and while on his vacation in the country he was taken with the headaches again. They became so severe that occasionally he was quite delirious, and he had one attack in which he lost consciousness for about fifteen min-

utes. The headaches continued to grow worse, but there was no sign of unsteadiness of gait or vomiting; there occurred, however, with increasing frequency spasmodic movements of the muscles of the back of the neck. He was taken to a physician, who treated him for epilepsy in the ordinary way, but no benefit followed. When I saw him he was in a dark room, and in the interval of the exacerbation of the pain he was drowsy and stupid. Examination revealed nothing except general bodily weakness. The ophthalmoscope showed extensive papillitis. The treatment consisted of administering ten grains of antipyrine three times a day and iodide, beginning with ten grains and increasing five grains at each dose until drachm doses were being given four times daily, and vesicants to the back of the head and neck. During the next few days the headache did not abate very much, and it was not until he began having the large doses of the iodide that its beneficent effects became strikingly manifest. Then the headaches gradually diminished, the twitchings of the muscles of the neck, which spasmodically had become very violent, ceased, and the patient returned to his business.

The headache, the papillitis, the twitching of the muscles of the neck, the profound disturbances of consciousness, which followed a number of localized muscular twitchings, and the prompt response to vigorous antisyphilitic treatment and its absolute indifference to heroic doses of bromide, the one really great measure in ordinary epilepsy, all these combined do not admit of any doubt concerning the true nature of the lesions in this case. At the present time the patient is engaged in active mental labor, he shows no signs of impaired mental vigor, and he has had no symptoms of intracranial mischief for several months past. Nevertheless, potassium iodide in thirty-grain doses is still kept up.

The second form of epilepsy, the result of syphilis, is as different from the first form as night is from day. The latter have nothing in common except time, the former little more than the name. The form of epilepsy of which we now speak postulates syphilis as a causative factor, speaking from a pathological point of view, in a similar way to tabes and general paresis—that is, the pathological change is, inferentially at least, the same as in ordinary epilepsy; in other words, there is a neuroglia increase and sclerosis, attended by resulting cortical atrophy due to the encroachment, and concomitant vascular and nutritional changes.

As there is nothing specific about the lesion in specific tabes, so is there nothing specific in syphilitic epilepsy. This form of epilepsy, to give it its principal traits, is characterized, as was laid down by Fournier (*Affections parasymphilitiques*), without the *cortège* of phenomena

of any other order, notably those well known as cerebral phenomena. It continues perpetually as epilepsy—that is, it persists as epilepsy pure and simple, without the association of other morbid phenomena. A very striking characteristic of this form of epilepsy is its lack of response to antisyphilitic treatment and its amenability to the bromides. It is one of the epilepsies developing late in life, after the third decade. The following clinical summary of a typical case will indicate the ordinary features of this form of syphilitic disease :

J. N., forty-three years old ; of good habits ; became infected with syphilis when twenty-four years old. He was treated with mercury for three or four months, and since that time he has believed himself to be entirely free from the disease. In 1891 he had an attack of influenza ; aside from this he has been well. Six or seven years ago, while at work, he felt as if he had received a blow on the head and fell to the ground unconscious. Was told he had a fit, foamed at the mouth, bit the tongue, etc. He can not say positively that he had not had dizzy spells previously to this attack of *haut mal*, but since that time attacks of *petit mal* have been very frequent. His attacks of *grand mal* and *petit mal* gradually became more frequent until he came to the hospital for treatment, where observations of the attacks proved them to be those of ordinary epilepsy. At first the patient was put on iodides in increasing doses, and the diet and bowels were regulated, but it was not until the bromides were substituted for these that an impression was made upon the attacks, particularly the *haut mal* attacks.

(To be continued.)

TWO CASES OF RAYNAUD'S DISEASE.

BY CRANSTON NASH, M. D.,
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CASE I.—Mr. J., aged twenty-three ; occupation, printer ; residence, Nashville, Tenn. ; presented himself to me for treatment, September 3, 1894. The fingers of his left hand were of a deathly pallor ; the rest of the hand was so dark a blue as to appear almost black. The thumb was not affected. He was otherwise in general good health. He said that three winters ago he had first begun to suffer with cold fingers. They would get cold and white and stay so, sometimes for a few hours, sometimes for several days, and then resume their normal temperature and color. Such

attacks during each winter were frequent, but always disappeared during the warm weather of spring, to bother him no more till the next winter. Toward the last of the winter of 1893 and 1894 he for the first time noticed a change in the color of his hand. It first became a light-purple color, and with the increasing severity of the attacks became a dark purple, almost black, while the fingers were white and cold. The last attack lasted about a month and went off with the onset of warm weather; he saw no more of it till September last, when upon taking a cold bath the trouble returned, and increased in intensity for a week, when he came to me in the condition described above. An ophthalmoscopic examination revealed the spasmodic contractions of the arteries of the fundus of the eye characteristic of "Raynaud's disease." There were no symptoms of aneurism or valvular disease of the heart which would produce an embolus; there was no history of syphilis and no evidence of kidney disease; so I pronounced it a case of "Raynaud's disease" pure and simple—a spasmodic contraction of the arteries, due to disturbance in the vasomotor system. I applied to his spinal column a descending galvanic current of twenty-four cells, with the positive pole in the cervical region and the negative pole in the lumbar region. I had the satisfaction of seeing the patient improve rapidly, and in six days, with three applications each day, the color and temperature of hand and fingers had become normal. He has had no return of it since, although he has been subjected to numerous cold baths, and to an artificial temperature of 10° above zero.

Case II.—Mr. S., traveling salesman, aged thirty-five; came to me for treatment in July last. At that time both feet to the tips of the toes, and the left hand from the radius to the tips of the fingers, were a dark-purple color. The man was vigorous and active, and in apparent good health. He said he had suffered with attacks of cold hands and feet for several years, but it was not till the past winter that he had noticed any change in the color of the skin of hands or feet. The feet first began to assume a livid color, and this was followed by the change in the hands. The attacks would come and go, but seemed to remain longer each time, and finally stayed with him from February to July, when he came to me for treatment. His urine was normal; he had no renal disease. He had no symptoms of aneurism or valvular disease of the heart, and there was no history of syphilis. An ophthalmoscopic examination showed the spasmodic arterial contractions characteristic of "Raynaud's disease." But it revealed more, and therein lies the secret of the diagnosis. There was, in the region of each "macula lutea" or "lutea retinae," a large, irregular, dark-gray deposit. When-

ever I see this in a patient, I am accustomed to think that he has some time been the subject of syphilitic poison, and to act accordingly. I made up my mind that it was a case of syphilitic endarteritis, with an added element of vasomotor spasm; that the arterioles were gradually losing their perviousness through a thickening of their walls from infiltration due to syphilis, and that it was only a question of time if left to itself till gangrene and necrosis would take place. In order to relieve the urgent symptoms, I gave him for three days a fiftieth of a grain of nitroglycerin three times a day, to lessen the vascular tension. He has now been for two months on antisiphilitic treatment. In two weeks the livid color had faded and the normal temperature returned, and to-day the man seems sound and well. The patient has since acknowledged having about four years before a suspicious sore on the glans penis, with three months' internal treatment at the time. This case shows us how important it is to be sure we have exhausted the information the patient can give us before making up our diagnosis. Here were two cases with symptoms so much alike that ordinarily they would be given the same treatment. I was perfectly satisfied with the man's statement till the ophthalmoscope revealed evidence to the contrary.

236½ North Cherry Street.

Society Transactions.

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.
NINTH ANNUAL MEETING, HELD AT THE CLIFTON HOUSE, NIAGARA FALLS,
ON MAY 28 AND 29, 1895.

FIRST DAY, TUESDAY, MAY 28TH.

DR. L. BOLTON BANGS, *President, in the Chair.*

Tuberculosis and Neoplasms of the Bladder: Surgery or Hygiene?—DR. L. BOLTON BANGS, of New York, read a paper on this subject. He stated that, among the many difficult cases of disease of the bladder that we are called upon to treat, none are more troublesome than those due to tubercular infection. At first the symptoms in these cases are often obscure, and so similar to those produced by other morbid conditions that the diagnosis is frequently doubtful, and in many even impossible. Later on the clinical picture becomes so characteristic that all doubt as to the diagnosis is removed, but at this stage treatment can effect but little, even in the mitigation of the sufferings of these patients, whose hope of cure is now out of the question. If, however, the disease can be discovered in its incipency and proper measures

taken for its relief, it may be regarded as curable, certainly in the sense of being held in abeyance.

Dr. Bangs then reported three cases of tuberculosis of the bladder, which he stated were typical of many, and in which hygienic treatment was followed by very beneficial results. Vitalization of the tissues is what these patients need, and they require at least two years of good hygienic residence in a temperate climate; but besides climate they need occupation, for *ennui* seems to be almost as deteriorating as confinement to the house. Surgical traumatism produced by overzealous efforts to relieve local symptoms seems to result in more harm than good. Such efforts are apt to put the unhappy patient still further below par and facilitate the development of other tubercular foci, either in the same organ or in one more distant. It is not necessary to enter into the question of whether the infection is an "ascending" or a "descending" one; the bacilli are in the individual's blood, and they only await a local congestion (following some form of irritation) in order to lodge and proliferate.

After faithful and zealous efforts to relieve by surgical interference the local symptoms of these cases, the speaker said he had been forced to the conclusion that the less instrumentation we resort to the better. In the genito-urinary tract, as elsewhere, the best defense of the tissues against the inroads of the bacilli, and that which finally effects a cure, is to be attained only by enabling the body to surround the tubercular deposits with a layer of healthy connective tissue. This can be done in no other way than by improving the quality and resisting power of the individual.

In strong contrast with the foregoing group, Dr. Bangs reported three cases of malignant disease of the bladder, in which the possibility of a cure also depends upon an early diagnosis. Unfortunately, in these cases many of the early symptoms are overlooked, or if appreciated are misunderstood. The patients themselves, because of the insidious onset of the disease, become accustomed to their first symptoms, and usually do not seek the advice of their medical attendant until the affection is well advanced.

In conclusion, Dr. Bangs said he had contrasted these two groups in order to present for discussion the points (1) that incipient cases of tuberculosis of the bladder should be subjected to hygienic rather than to surgical treatment, and (2) that in the incipient stages of vesical neoplasms a surgical procedure of the most radical kind should be instituted.

DR. JOHN P. BRYSON, of St. Louis, said he was entirely in accord with the statements made by Dr. Bangs regarding the treatment of these tubercular cases. In tubercular cystitis perineal drainage is not to be recommended. In two of his cases the perineal wound became infected and never healed. The suprapubic route is altogether to be preferred when drainage is to be resorted to at all in these cases. An early diagnosis is of the utmost importance, and is possible, perhaps, earlier than was intimated in the paper. Careful examination of the prostatic urethra by means of the finger in the rectum and repeated searches for the bacilli in the urinary sediments will help us. When a suprapubic incision is deemed necessary, experience has led him to make the incision as high up and as far away from the vesical outlet as possible, so as to have a direct drainage channel and keep the tube away from the vesical outlet, which is the most sensitive part of the bladder. He was gratified to hear Dr. Bangs call attention to the fact that so far as we

can observe clinically the disease enters the urogenitalia through the hæmatic channels. That is one of the things to be recognized in connection with the ætiology of tubercular disease. He has, however, seen some cases where he thought the infecting agent came through the bladder fundus by way of the peritonæum. In those instances the patients were in the habit of drinking large quantities of milk. In such cases we probably first get an infection of the solitary glands in the ileum, and afterward a tubercular patch in the peritonæum; and as the peritoneal fluid is a culture medium, or is capable of sustaining these bacilli, the infectious process is apt to persist and travel downward to the bladder.

In cases of vesical neoplasms the symptoms frequently come on late. If the new growth is situated toward the fundus, or at any considerable distance away from the vesical outlet, there is no reason in the world why we should get any symptoms of its existence for a considerable length of time, and the first symptom is apt to be hæmorrhage. There is one symptom in connection with hæmorrhage which Dr. Bangs did not mention, namely, the relief that is apt to follow free bleeding. When the growth is situated near the vesical outlet, we get the frequency of urination which follows disturbance in that region. The speaker said he was not so optimistic in regard to the benefit to be derived from early operation in cases of neoplasms of the bladder. He had never yet seen a case of papilloma of the bladder, supposed to be benign, which did not prove to be malignant and destroy the life of the patient.

DR. GARDNER W. ALLEN, of Boston, said that in support of Dr. Bangs's views regarding the beneficial effects of hygiene in tuberculosis of the bladder he desired to mention a case which was under his observation for about six months last summer. The urinary symptoms were very pronounced: micturition was frequent and painful, the urine was turbid and contained tubercle bacilli. The vesicle and epididymis on one side were indurated and swollen. The man's occupation was that of a carpenter, which kept him constantly out of doors. With the exception of the hygienic, he received no treatment whatever, and his symptoms gradually disappeared. The last time Dr. Allen saw him he was practically a well man.

DR. BRANSFORD LEWIS, of St. Louis, referred to a case of tubercular cystitis in a farmer who had lived for several years on a farm in Kansas. He came to St. Louis, and there, under supporting treatment, rest, and creosote and cod-liver oil internally, the urine, which had been cloudy for three years, cleared up, and the man gained about twenty pounds in weight in three months. After his recovery he went back home and several months later he reported to Dr. Lewis that there had been no recurrence. Before treatment was commenced, his urine was of a milky color, and he complained of frequent and painful micturition.

DR. BRYSON said that, so far as internal treatment is concerned in these cases, he had derived much benefit from the use of the simple hypophosphites. Cod-liver oil had not been particularly serviceable. He had seen no benefit from the malt preparations, and creosote had not in any way helped his patients. In the early stages of the disease, he had seen the frequency of urination relieved by the internal administration of the oil of yellow sandalwood. As regards climatic treatment, he had sent about a score of patients to southern California, where the climate seems to be particularly advan-

tageous. For a time he sent them to southwestern Texas, but his faith in the efficacy of that climate was shaken by the fact that a native of that region came to him suffering from a very aggravated case of tuberculosis of the prostate and deep urethra.

DR. EUGENE FULLER, of New York, said he agreed with Dr. Bangs that hygiene is the most important factor in the treatment of these cases. Many people are so situated, however, that they can not change their residence, and then other sustaining measures are called for. Alcohol, in some form, is often of service. He had seen some patients who were benefited by the use of the malt liquors, while in other cases these gave rise to irritation. The hypophosphites and cod-liver oil (if the latter can be digested) are also of service.

DR. GEORGE CHISMORE, of San Francisco, said that while in the main he agreed with the statements made by the author of the paper, there were some points in regard to which he differed. He expressed the opinion that the pain complained of by these patients was very frequently due to the methods of search employed in endeavoring to discover the cause of the trouble. This view of the matter was first brought to his attention by the following case, which came under his observation : About five years ago, a prominent ship-builder on the Pacific coast, a very energetic man, fell through the hatchway of a ship and injured his left side. A month or two afterward he applied for treatment, complaining of more or less uneasiness in the region of the left kidney, extending down toward the bladder, together with great frequency of micturition, without pain. On examination, the urine was found to be loaded with pus and a considerable quantity of blood. There was an indistinct feeling of enlargement of the left kidney. About ten or twelve years previous to this he had lost an eye in a rather peculiar way : the eye suddenly became painful and was enucleated, and the oculist who performed the operation gave the opinion that it was tuberculous. His urinary symptoms also being very suspicious of that disease, hygienic measures were instituted, and the man was urged to abstain from all local treatment. Repeated examinations of the urine failed to detect tubercle bacilli until about a year and a half later, when a tubercular epididymitis made its appearance on the right side. It went on to suppuration, and just before opening it the tubercle bacilli were demonstrated in the urine. On opening the epididymis, the pus was found to be loaded with the bacilli. The wound was kept open for two months, during which period the man lived in the country. The nodules extending upward along the cord gradually disappeared. The hydrocele which attended the epididymitis was tapped at short intervals, and eventually vanished, although it was never injected ; the epididymitis also healed, and the general condition of the patient has steadily improved. He has resumed his work and is feeling well. The speaker expressed the opinion that if in that case the bladder had been washed out and subjected to repeated searchings, pain would have been added to the patient's other symptoms and the progress of the case would not have been as favorable. As a routine treatment, washing of the bladder is certainly not to be recommended, particularly in tubercular cases. He agreed with Dr. Bryson that early operation in cases of malignant growths of the bladder does not always effect a permanent cure. Vesical hæmorrhage does not necessarily indicate the presence of a malignant growth. In one case under his observation there was

hæmorrhage of the bladder twenty years ago, followed by a long period of quiescence, and then several more attacks. In that case there is probably no malignant process, or, if one exists, its progress is very slow.

DR. BANGS, in closing the discussion, said that while he was willing to admit that the cure of malignant disease of the bladder is still a problem, the success he has obtained in operating upon cases of so-called papilloma of the bladder warranted him in expressing the belief that such cases are curable by early operative interference.

Hæmaturia.—DR. WILLIAM K. OTIS, of New York, read a paper on this subject. He stated that the presence of blood in the urine is a symptom demonstrating a lesion in some portion of the genito-urinary tract which may be comparatively insignificant, or it may indicate the occurrence of disorders which will inevitably prove fatal. Always alarming to the patient, it claims the most careful consideration from the surgeon, presenting difficulties only equaled by the importance of making an accurate diagnosis upon which to base any logical form of treatment.

After giving a number of chemical tests to demonstrate the presence of blood in the urine, the author stated that the actual presence of blood may also be determined by the use of the spectroscope; microscopes having a spectroscopic eyepiece are especially adapted for this purpose. When the existence of hæmaturia has been definitely determined, the next important step is to ascertain as accurately as possible in what portion of the urinary tract the lesion from which the hæmorrhage emanates is situated. When it is situated in the anterior urethra, between the meatus and the compressor urethræ muscle, if the blood is sufficient in amount it will exude from the meatus, or may be pressed out by stripping the urethra with the finger. If the urine is passed in two portions, the first only will contain blood. When the hæmorrhage is situated in the posterior urethra, between the compressor urethræ muscle and the internal sphincter of the bladder, blood will not exude from the meatus, and if it is sufficiently large in amount the pressure will overcome the lesser resistance of the internal sphincter, and the blood will flow back into the bladder, making it difficult to decide whether its source is from the bladder or from the posterior urethra. In most of the cases where the bleeding comes from the posterior urethra there is considerable urgency in urination, although occasionally this symptom is absent.

Where the point of hæmorrhage is situated within the bladder, the entire urine therein contained will be intimately mixed with blood, and if the hæmorrhage is profuse, clots may form, which have a certain diagnostic significance if they are too large to have passed through the ureters. Some authors consider the color of the urine an indication of the origin of the hæmorrhage, but this varies so greatly under different conditions that it is unreliable and is of but little value in arriving at a diagnosis. Microscopic examination of the urine may show evidence of the presence of some new growth in the bladder, while, on the other hand, the detection of casts containing blood-corpuscles indicates that the lesion exists in the kidney.

Should the examination of the urine fail to locate the source of the hæmorrhage, we may proceed to the direct examination of the bladder itself by carefully washing out the organ through a woven catheter by means of a hand syringe, and then inject a few ounces of clear fluid and withdraw the

catheter just far enough to prevent the fluid from escaping; after a few moments the catheter is reintroduced, and, if the fluid returns mixed with blood, the hæmorrhage is probably vesical in origin.

The resorption test, made by introducing a solution of potassium iodide into the bladder and shortly afterward testing the saliva for free iodine, is also extremely valuable and satisfactory for the purpose of determining if a lesion exists within the bladder. When the bladder is the seat of a new growth its presence may sometimes be determined by bimanual palpation with one finger in the rectum or by examination with an ordinary searcher or sound.

The value of an examination with the electro-cystoscope in cases of hæmaturia in which the diagnosis is difficult can scarcely be overestimated. By its aid we are enabled not only to locate with exactness the portion of the bladder from which the hæmorrhage emanates, but also to determine the cause and extent of the lesion. The instrument is especially valuable in making a correct diagnosis in renal hæmorrhage, for by its use we are able to ascertain not only that the blood is derived from the kidney, but also to tell definitely on which side the affected organ is situated.

In locating hæmorrhage of the kidney, the clinical symptoms, physical signs, and previous history of the patient are usually of great value, although hæmorrhages occasionally occur without the slightest warning and without other symptoms. As a rule, however, symptoms are present which point to the kidney as the seat of the difficulty. If the kidney is the seat of a malignant growth, an increase in its size can often be ascertained by bimanual palpation, while pressure over the affected organ will usually produce a sensation of pain or sensitiveness if renal calculus is present.

Lastly, if for any reason it is impossible to locate the lesion, and at the same time the bladder appears to be its most probable seat, it is perfectly allowable to perform an exploratory suprapubic section, especially if the hæmorrhage is severe or has been of long duration.

DR. W. F. GLENN, of Nashville, said that by means of the Leiter cystoscope and the Otis urethroscope we can often make out with certainty whether the source of the bleeding is the urethra, bladder, or kidney; these instruments have proved of great service in this connection, and make the application of chemical tests more or less unnecessary.

DR. BRYSON said that while he was inclined to agree with the statement made by Dr. Glenn, we still need an instrument which will enable us to get a good view of the vesical outlet. His views obtained of that region with the present instrument had been very deceptive.

In one case of intermittent hæmaturia coming under his observation, the bleeding extended over a period of seven years, coming on two or three times yearly. It was easy enough to eliminate the bladder as the source of the hæmorrhage, but for a long time it was found impossible to decide from which kidney the blood came. The only subjective symptom complained of was an uneasy, dragging feeling in the right loin. One day, while studying the right ureteral orifice with the cystoscope, he saw a cloud of blood floating over from the left side, and on turning the instrument, several jets of what appeared to be bright red blood issued from the left ureter. Several days later he found the left ureteral orifice blocked by a blood clot; this enabled him to obtain urine from the right ureter, which was examined and found

to be healthy. He then removed the left kidney, which resulted in a complete cure of the patient.

Dr. Bryson also called attention to the possibility of determining the source of pyuria when it is unilateral and of renal origin. Familiarity with the use of the cystoscope will enable one to differentiate between urine free from pus and urine containing pus as it issues from the ureteral orifice. The pus comes in the form of small flakes, and if the window of the cystoscope is approached close to the ureteral orifice, magnification takes place and the flakes can be seen whirling past. The speaker said he had had no experience with the use of the ureteral catheter in the male. He had catheterized the ureters in the female, and regarded it as a very uncertain procedure, at least in his hands. The cystoscope he had also found very useful in determining the presence of one or two ureteral orifices, in cases where nephrectomy is contemplated. When properly and skillfully used there is probably no instrument which affords the same amount of diagnostic advantage as the cystoscope. To use the instrument well requires long practice, and the photographs of cystoscopic views which are now accessible are among the very best aids we have in studying the vesical interior. We still need a cystoscope, however, which will enable us to view the vesical outlet about as we see it when we make a suprapubic incision into the bladder and look down upon it. One source of error he had met with is that the vesical folds may be so magnified by the instrument that they appear in some cases to be tumors, and where there is bleeding the difficulty in making a diagnosis may be insurmountable.

DR. EDWARD R. PALMER, of Louisville, referring to the case mentioned by Dr. Bryson, in which pain was complained of in the right loin and the left kidney was found to be diseased, inquired if it is not laid down as a rule that it is on the side of the sound kidney that the subjective symptoms are located? He had had no trouble in getting a view of the bladder neck, for which purpose he employed a long Klotz tube (Nos. 24-26), and the Otis instrument lamp. One case had come under his observation in which a fibrous condition at the neck of the bladder was mistaken for a tumor and the bladder opened.

DR. AENER POST, of Boston, referred to the resorption test, which was mentioned by Dr. Otis, and stated that some doubts had arisen in his mind as to its accuracy. He recently saw a case, in an old gentleman, whose bladder was so irritable that in order to give him a night's rest one drachm of tincture of opium was injected into the organ. This put him to sleep for several hours. The next night the same thing was repeated, without having any effect; and on the third night a similar dose injected in the same way gave rise to prolonged and dangerous narcosis. The same dose under the same conditions gave rise to these extremely different results. Dr. Post said that in two cases of carcinoma of the kidney recently coming under his observation, some very interesting casts of the ureter were seen. In one case there were a large number of very short casts, while in the other there was one continuous cast over five feet in length.

DR. BRYSON said he had never before heard that we should look for the diseased kidney on the side opposite to that on which the subjective symptoms are complained of, nor had his own experience borne out any such conclusion.

DR. R. W. TAYLOR asked Dr. Palmer whether he had not found that the introduction of large instruments into the posterior urethra is apt to give rise to epididymitis.

DR. PALMER replied that he had never seen any untoward results follow the introduction of the long Klotz tube. By depressing the flange of the instrument between the patient's thighs it usually slips in quite readily, although sometimes it only enters after repeated trials.

DR. GLENN said that in one case he filled the patient's bladder with warm water and then drew it off through the long Klotz tube, to demonstrate that it could be done.

DR. TAYLOR said he regarded the practice of introducing such large instruments into the posterior urethra as reprehensible, excepting by the most expert.

DR. BRYSON said he did not see why a straight tube should not be introduced into the bladder. It is constantly done by surgeons who practice litholapaxy.

DR. OTIS, in closing the discussion, said that while the cystoscope is of great value in detecting the source of hæmorrhage from the genito-urinary tract, there are certain cases in which it can not be used because of the free bleeding, or when the bladder is very small. He agreed with the statement made by Dr. Bryson that in cystoscopy we are not able to get a good view of the internal urethral orifice. In one case of hæmaturia of ten years' standing recently coming under his observation thorough and repeated cystoscopic examinations failed to reveal any vesical lesion, but after the bladder was opened above the pubes a careful search revealed the presence of a pedunculated tumor, about the size of a small filbert, which was so attached that it hung down to the edge of the internal urethral orifice, not blocking it, however. With the cystoscope he had mistaken this for one of the folds of the bladder which are occasionally seen in that region. Dr. Otis said that as a rule he has found that the pain and discomfort were on the affected side—not on the side corresponding with the healthy kidney. He regards the resorption test as a very reliable one, and had in many instances proved its value. It is possible that we may have tumors of the bladder which resist the resorption of iodine.

Gonorrhœa in the Female.—DR. R. W. TAYLOR, of New York, read a paper on this subject. He stated that within the past ten years our knowledge of gonorrhœa in the female has been much amplified, many doubtful and obscure points in its diagnosis have been cleared up, and a flood of light has been thrown upon a series of grave consequences which supervene in its course. While to-day it may be said that our knowledge rests upon a very satisfactory and scientific basis, there are still many points which have yet to be cleared up, and several questions concerning it which perhaps may be solved in the future. Undoubtedly, the statistics and investigations made by gynecologists have been the chief means of enlarging and rendering more clear our ideas upon this once most obscure and much-neglected subject. It must also be admitted that the discovery of the gonococcus has been of very great help, since by its study we have been able, in the main, to distinguish the mucous-membrane inflammations produced by it, and to quite sharply distinguish them from the simple formation of muco-purulent and purulent inflammations due to other causes. In earlier days, the free escape of very

green pus from the uterus and vagina was considered indubitable evidence of gonorrhœal infection, and the gelatin-mucoid secretion in the flat-plug form from these parts was regarded as evidence of a simple, noninfectious process. To-day, in the light of our more extended and precise knowledge, we find that the pus secretion may be harmless, while infection may lurk in the seemingly innocent mucus-plug.

Gonorrhœa in the female is certainly much less frequent than it is in the male, and usually runs a much less definite course. In the main it localizes itself in one or two parts, runs an acute course, becomes subacute, and ceases. In many cases it begins and remains in a subacute condition for a considerable or a long time. Then, again, in some cases it progressively invades the genital tract. Having become lodged in the cervix uteri, it may extend to the body of that organ, attack the tubes and ovaries, and then the peritonæum. Patients thus affected are usually sterile, they suffer intense discomfort and pain, and their health is impaired until they may become mental and physical wrecks. These sad results certainly do occur in a relatively quite large number of cases. Instances are not infrequent in which wives are infected with gonorrhœa by their husbands, who perhaps regard themselves as cured. It is very difficult, and even impossible, to get reliable statistics as to the frequency of the occurrence of acute gonorrhœa in women. It of course exists largely in prostitutes, particularly in quite young ones, and those of the lower walks of life, and it is not uncommon in shop girls and others, who, for various reasons, leave their homes and cease to be under parental and family restraint. In the light of recent investigations and studies it is clearly proved that in women over twenty years of age the urethra and the cervix uteri are the parts most commonly attacked by gonorrhœa. There can be no doubt of the existence of a true gonorrhœal infection of the vulva, but it is not very common. It is sometimes met with in young girls between fifteen and twenty years of age, usually as the result of their first infection, and in their earlier attempts at intercourse. Although the existence of gonorrhœal vaginitis has been denied, there can be no doubt that in a restricted number of cases gonorrhœa primarily attacking this tube does occur. It is also not infrequently secondarily infected by the gonorrhœal secretion from the *cs uteri*.

Gonorrhœa in women, as in men, consists of an exudative inflammation of the submucous connective tissue, and the genital organs of women are so extensive, complex, and involuted, and so profusely supplied by blood-vessels which frequently undergo normal engorgement, that it can readily be understood why the morbid process may show a tendency to become chronic and lurk and hide.

There has been a tendency developed within the past ten years to refer, in a loose and unscientific manner, all female ailments to gonorrhœa, and attribute to many husbands, who in earlier days had gonorrhœa, a gonorrhœal infection of their wives, which produces serious consequences. The extreme and exaggerated views of Noeggerath, who claimed that eight hundred out of every one thousand men living in large cities suffered from gonorrhœa, which they never recovered from, and who, on marrying, sooner or later infected their wives, have done much to perpetuate these ideas. There is a tendency nowadays to harp upon the longevity of the gonococcus, its phoenixlike power of resuscitation, and its relentless virulence. This idea, put forth by some syphilographers, has had undue weight upon many gynæcologists, who,

under its influence, are led to think that the gonococcus in the male and female never dies, but that it is ever ready to produce pelvic mischief. Dr. Taylor said he had seen many young women who have suffered from uterine and pelvic disease after marriage, whose trouble was induced by instrumental manipulation at the hands of energetic young men, possessed of an ambition to be known as gynecologists. Minor surgery is certainly the cause of a great many cases of uterine and pelvic disease. In estimating the importance of gonorrhœal infection as a cause of female trouble, we must individualize rather than generalize.

DR. PALMER said the paper of Dr. Taylor was so elaborate that he would only refer to one or two of the points brought up. It has been stated, and correctly so, that in these cases of diseased tubes of long standing, and containing large quantities of stagnant pus, the latter very frequently fails to show the presence of gonococci. On making a section of the structure of the tube itself, however, you will find the gonococcus living in the stroma. The same may be said with reference to the cervix. The gonococcus may be absent in the secretions, but if, after carefully cleansing the cervix, you curette it, the micro-organism is often found in the scrapings. It possesses a tendency to burrow underneath the surface. In one case of mono-cryptorchidism coming under his observation there was gonorrhœal infection of the incarcerated testicle, which became so painful that it had to be removed at the height of the inflammation. The gonococci were found in the intimate structures of this organ, which was of course rudimentary.

DR. GLENN said he regarded the statement made by some gynecologists that a man never gets well from a gonorrhœa as nonsense. The gonococcus, unless it becomes imbedded in the mucous membrane, is not a difficult micro-organism to kill.

DR. BRYSON said that in the case reported by Dr. Palmer the gonorrhœal infection of the retained testis seems to prove definitely that it was a case of mono-cryptorchidism with complete continuity of the connecting apparatus.

DR. BRANSFORD LEWIS, of St. Louis, said the experiments of Wertheim have clearly shown the penetrative power of the gonococci. It was found that they could pass directly through the structures of the tubes and give rise to disease within the tissues of the ovary as well as the peritonæum.

Iodoform-ointment Injections in the Treatment of Suppurative Adenitis of the Groin.—DR. JAMES R. HAYDEN, of New York, read a paper on this subject. He stated that the chief objects to be attained in the treatment of suppurating buboes are their rapid disappearance, an amelioration of pain, and the absence of a compromising scar in the groin. To this end various surgical procedures have been suggested from time to time. The following method has been employed by Dr. Hayden with very satisfactory results: The operative field having been shaved and rendered surgically clean, a few drops of a four-per-cent solution of cocaine are injected beneath the skin where the puncture is to be made. The pus is then evacuated and thoroughly squeezed out through a small puncture. The abscess cavity is then injected with pure peroxide of hydrogen until the fluid returns practically clear. It is then washed out with a 1-to-5,000 bichloride solution and injected with a ten-per-cent iodoform ointment. Then a cold-water bichloride dressing is applied with the idea of congealing the ointment. The patient should be kept quiet for forty-eight hours,

although it is not necessary that he be confined to bed. The dressings are removed on the third or fourth day.

DR. W. K. OTIS said he had had considerable experience with this method of treating buboes, and in many instances he regarded it as the best. It is particularly to be preferred in certain cases because it leaves no scar. In most instances he had found that a single injection was not sufficient, and in those cases where two or three injections of the iodoform failed to effect a cure he substituted the balsam of Peru with very good results. He regarded iodol equally effective, and it lacks the objectionable odor of iodoform.

DR. POST said that by merely evacuating the buboes through an aspirator, without injecting iodoform ointment or anything else, we may occasionally effect a cure. After evacuation a firm spica bandage should be applied. We should remember in discussing this subject that there is no single method which is applicable to all cases of buboes.

DR. TAYLOR said he employed the Scott-Helm-Fontan method of treating buboes, with almost uniformly good results. Since adopting the plan of washing out the abscess cavity with peroxide of hydrogen better results have been obtained than heretofore. The fact should be borne in mind that with syphilitic adenopathies we sometimes get a slight periglandular infiltration which is apt to give rise to the sensation of fluctuation.

DR. LEWIS said that when these cases are seen early enough, when only a small amount of pus has formed, he has succeeded in curing them by making a puncture with a narrow-bladed bistoury, followed by the application of a tight bandage. If enucleation is performed sufficiently early, when the skin is not very much involved, we can sometimes get almost primary union. In one instance he succeeded in getting primary union on both sides. As regards the injection method, he has employed with varying success an emulsion of iodoform in linseed oil, after washing out the cavity with peroxide of hydrogen and dilute bichloride solution.

DR. JAMES BELL, of Montreal, said that in his experience the cases suitable for this injection method of treatment are comparatively rare. The majority of cases are not those in which there is a simple pus cavity; if a pus cavity exists, there are usually also broken-down glands, and the most important cases of all are the chronic ones in which there is some periglandular ulceration, and these are quite unsuitable for the injection method. In these cases, when the glands are enucleated, we often find small abscesses and a broken-down condition of the glands themselves. Enucleation should not be considered a serious operation. It is not difficult, and the only objections to it are that it requires the use of an anæsthetic and leaves a scar. The greater portion of the wound can usually be sutured.

DR. OTIS said he could not agree with Dr. Bell that enucleation of the glands in the groin was not a serious operation. If we start in to enucleate septic glands, it is good surgery to follow them up and remove them entirely, and in attempting to do this we are often compelled to go a good deal further than would at first appear necessary. Such an operation leaves a very distinct scar, and we all know what such a scar means. Furthermore, it confines the patient to bed for two or three weeks.

DR. HAYDEN, in closing the discussion, expressed the opinion that the injection method is only applicable to cases where there is a true abscess cavity.

The Infiltration Method of Local Anæsthesia in Genito-urinary Surgery.—

DR. BRANSFORD LEWIS, of St. Louis, read a paper on this subject. He stated that in July, 1894, at the German Congress of Surgeons, Dr. Schleich detailed a new method of producing local anæsthesia by the use of intracutaneous injections of very dilute solutions of various drugs, which he termed infiltration anæsthesia. Later, in a monograph entitled *Schmerzlose Operationen*, the author treated the subject more extensively, and gave the results of its use in some three thousand operations, minor and major. The principle of the method consists in injecting intracutaneously certain solutions and dissipating the sensibility of the peripheral nerves by the pressure of the infiltrated fluid, by the anæmia which it causes, and by the comparatively low temperature at which it is injected; the effects are produced by the fluid itself rather than by any particular drug which it may contain. As a matter of fact, the drugs used are of only incidental importance.

In his various surgical procedures Dr. Schleich found the three following solutions of graded strength to answer all purposes:

Solution No. 1:

Cocain. muriat.....	gr. iiij;
Morph. muriat.....	gr. $\frac{1}{2}$;
Natr. chlor.....	gr. iiij;
Aq. dest.....	ad $\frac{3}{4}$ iiij.

M. Sterilisat. adde sol. ac. carb. (five per cent) gtt. iiij.

The other two solutions are practically the same, the only differences being that in solution No. 2 the amount of cocaine used is reduced to one and a half grain, while in solution No. 3 only one sixth of a grain of cocaine is employed and one twelfth of a grain of morphine.

It has been observed that these solutions, when used cold, are much more highly anæsthetic than when they are warm. For this reason it is advisable to keep the bottle on ice before and during the operation. Every tissue of the body, without exception (skin, muscles, glands, mucous membranes, nerves, etc.), becomes insensible to pain when infiltrated in the manner described. Anæmia being one of the effects produced by these injections, there is less bleeding than under ordinary circumstances.

Dr. Lewis said he had employed this infiltration method in operating on buboes (enucleation), in opening a prostatic abscess through the perinæum, in circumcisions, and in other minor operations. In working in superficial structures, its effect was all that one could desire. In the deeper parts of wounds he was not so successful as he hoped to be in the future after increased practice had made him more familiar with the method.

DR. BRYSON referred to a case which he reported in the *New York Medical Journal* (April 27, 1895), in which he performed complete castration for prostatic overgrowth under cocaine anæsthesia. The patient was a man, aged seventy-four years, whose heart and kidneys were in such a condition that general anæsthesia was considered unsafe. The operation was performed in the following manner: The entire scrotal sac was seized by the left hand as high up as possible, and a strong rubber band passed above the hand about the root of the sac, close to the peno-scrotal and perineo-scrotal angles. This band was drawn tight enough to strangle the scrotal and probably the funicular circulations. The line of incision on the anterior surface of each sac was now injected with a four-per-cent sterilized solution of cocaine, one

half drachm of the solution being used for each side. The needle was then inserted half an inch below the constricting band into the central parts of the cords, and five minims of the same solution were thrown in. The usual incisions were then made, exposing the glands and enough of the cords to answer the purpose and the organs removed. The cords were ligated *in toto*, anchor loops were placed in the stumps and allowed to fall out of the lower angles of the incision, and the wound was closed with continuous catgut sutures. So complete and satisfactory was the cocaine anæsthesia, that the patient was not aware of the steps of the operation, which was done at leisure. Beyond a slight mental exhilaration, no systemic effects of the cocaine were noticed.

The speaker called attention to a possible source of danger in cocaine anæsthesia, and one especially liable to occur when blood stasis is produced by a constricting band. The introduction of cocaine solution under such conditions results in extensive coagulation of the blood, especially in the smaller veins. So far as he has observed, this thrombosis does not interfere with the healing of the wounds, and so long as the clots are aseptic no harm is likely to ensue; but a fault in the asepsis of the fluid, the syringe, the needle, or the skin over the field of operation might easily infect one or more of the thrombotic clots, which, getting afloat in the blood stream, would be capable of causing mischief.

Dr. Bryson said that since performing the above operation he has two or three times done phlebectomy for varicocele by practically the same method. Of late, in operating about the bladder, especially in old men, he has been inclined to use cocaine anæsthesia in preference to chloroform or ether. He has had no experience with the solutions mentioned by Dr. Lewis. He has employed very dilute cocaine solutions, and the results obtained did not impress him very favorably. He would prefer to use the cocaine in those cases where it is possible to first strangulate the parts by a ligature, and so make sure that too much of the drug will not enter the general circulation too rapidly.

Dr. CHISHMORE said he had twice performed perineal section under the use of very weak solutions of cocaine. In one of the cases the patient stated that he felt no pain whatever. In the other the result was rather peculiar: at the time of making the incision the man did not show any signs of pain, but at the moment he began to bore into the tissues with his finger the patient began to howl. Dr. Chismore said he had performed several circumcisions under cocaine with little or no pain.

Dr. BRYSON said that recently a patient upon whom he had done a nephro-lithotomy developed a fusiform swelling a little to the right of the anterior superior spine, and, suspecting an abscess along the course of the ureter, he exposed the ureter outside the peritonæum. He attempted to do the operation under cocaine, and got along very well until he reached the transversalis fascia, when the patient complained so much of pain that chloroform had to be employed. An abscess was found, as expected. The speaker expressed the opinion that cocaine anæsthesia will hardly answer in operating on the deeper tissues.

Dr. LEWIS said the failure of Dr. Bryson to complete his operation under cocaine in the case referred to simply accentuates the difference between cocaine anæsthesia and the method described in his paper. In that method

the cocaine is only added to produce an immediate and not a permanent effect; the latter is produced by the solution itself, and the cocaine assumes a minor degree of importance. We can employ this method in operating on the deeper tissues and in regions which can not be strangulated by a ligature. Schleich has employed it in performing nephrectomy.

DR. PALMER stated that a ten-per-cent solution of antipyrine thrown into the bladder after the use of silver nitrate very quickly deadens the pain; he had found it as effective as cocaine.

Remarks on the Seminal Vesicles.—By DR. EUGENE FULLER, of New York. In connection with these remarks Dr. Fuller exhibited a number of photographs of dissections made by him, which tended to clear up various anatomical points which have hitherto remained in doubt. The exact relationship which the prostate bears to the seminal vesicles was shown, and from this inferences relative to the mechanism of ejaculation were drawn. One of the most interesting photographs was that of the interior of a seminal vesicle, together with its ejaculatory duct. The point of entrance into the vesicle of the ampulla of Henle and the openings of the convoluted canals were also to be seen. This photograph showed that the cavity of the ampulla of Henle was really shut off from that of the vesicle by a valvelike opening, and that the cavity of the ampulla was very small in comparison with that of the vesicle. By these anatomical demonstrations Dr. Fuller showed that his process of stripping the vesicles was capable of accomplishment, and that the material stripped out came from the vesicle, and not from the ampulla. These photographs, together with a full description, will be reproduced shortly in a book which the author is preparing on the subject.

Three Cases of Epithelioma of the Penis.*—By DR. W. N. WISHARD, of Indianapolis.

DR. R. W. TAYLOR said there are only six cases of cancer of the penis on record where the disease has become generalized. It usually centers itself in the inguinal ganglia, and even if the glands do not appear to be enlarged they should be taken out, as it has been shown that they are often distinctly cancerous. In his case of cystic sarcoma of the testicle, reported at the meeting last year, recurrence took place in the retro-peritoneal ganglia, and the spleen and liver became the seats of sarcomatous growths.

DR. CHISMORE referred to a case of epithelioma of the penis reported by him last year in which he removed only about one third of the glans penis. The operation was performed in July, 1893. A few months later the glands in the right groin became involved and were removed. In October, 1894, one of the glands in the left groin became involved and was removed; the wound never healed, and with the greatest rapidity there sprang from that incision a large, cauliflowerlike growth, which attained the size of a small cabbage. The patient died very recently. In that case there was never any recurrence in the right groin nor in the penis itself. The question arises, Would the final outcome have been any better if the penis had been removed higher up?

(To be continued.)

* Will be published.

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SOME CONSIDERATIONS ON PROSTATECTOMY.*

By GEORGE WOOLSEY, M. D.,
New York,

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Medical Department of the University of the City of New York.

(CONCLUDED FROM PAGE 288.)

THE many advantages of the suprapubic method are in part counterbalanced by many disadvantages and the imperfect way in which it meets, or fails to meet, the requirements.

In my opinion, McGill's claim that the suprapubic incision insures complete and most efficient drainage is untenable. Although it may drain the bladder after a fashion, it will not keep the pocket made by the prostatectomy clear of urine, which can not but affect it unfavorably. Treves * has stated that "the various siphon drainage tubes are delusions and snares." It seems to me, as Chance † says, that perineal drainage is the best way to avoid the difficulty for which Kümmel dilates the prostatic urethra and uses a large catheter drain, after suturing the bladder. As Bennett May ‡ remarked, in discussing McGill's last paper, "for drainage the suprapubic is far inferior to the perineal cystotomy." If one is to rely on suprapubic drainage, the plan used by Cameron # seems to be the plan to recommend. On account

* *Operative Surgery*, vol. ii, p. 589.

† *Medical Press and Circular*, London, 1894, N. S. lviii, 3.

‡ *British Medical Journal*, October 19, 1889, p. 863.

Transactions of the Glasgow Pathological and Clinical Society, 1891-'93, iv, pp. 180, 184.

of the stinking urine, the bladder, opened supra pubes, was drained and treated for cystitis, and after six weeks prostatectomy was performed when the patient was in a better general and local condition. The question of drainage may have been in part the reason for Belfield's modification of McGill's operation. But other objections to the suprapubic route are also met by Belfield's method—namely, the suburethral growths already referred to, which can not well be reached by the suprapubic incision alone, and which, unless removed, invalidate the result. As Belfield* says, the addition of the boutonnière "affords an access to the entire prostate, which may convert an utter failure into a complete success." By Belfield's method a "low-level route" is the object sought for, and as the necessity for removing very large masses of the prostate is done away with, the mortality should thus be lowered. Besides the perineal opening and perineal drainage Belfield adds overstretching of the prostatic urethra, thus tacitly acknowledging the importance of the compression of the lateral lobes. This was first employed by Schmidt in a case already referred to. Bangs† has reported a case where its use was very effective, but he tells me that the effect has unfortunately proved temporary, indicating that the lateral lobes require something besides stretching. This something Harrison tries to supply by long-continued tube pressure, but this, too, is generally admitted to be insufficient, and some more radical treatment of the lateral lobes is required. Belfield claims that the lateral lobes can be much more easily dealt with by the combined suprapubic and perineal approach. Although Moullin‡ says that the "lateral lobes, as far as they are obstructive, can in general be dealt with quite as well, if not better, from the interior of the bladder," yet the above considerations indicate that at least without the addition of the perineal opening the lateral lobes may give trouble. I doubt if it is feasible to treat or remove them sufficiently through a suprapubic opening in most cases. In fact, as a further illustration of the failure to meet the requirement to permanently remove the cause of the obstruction, we may cite the case# where McGill was unable to remove more than a mass the size of a pea from the prostate, and the remark of Bennett May, || who says, "I have not found removal at all an easy matter." Alexander and others have reported similar experiences.

* *Loc. cit.*

† *Annals of Surgery*, April, 1893.

‡ *Loc. cit.*

Belfield. *American Journal of the Medical Sciences*, November, 1890.

|| *British Medical Journal*, October 19, 1889, p. 863.

The objection of recurrence, which applies to the requirement of permanency in the removal, probably applies no more, if as much, to the suprapubic method than to others. Though cases have been reported, it occurs, according to J. William White,* "in less than one per cent of recorded cases," and not unlikely depends in some cases on an incomplete operation. The possibility of stricture following the operation, suggested by Bryson and others, has never been observed, to my knowledge.

McGill's claim that the operation in question is equally safe is not borne out by statistics—i. e., 16 per cent mortality by McGill's tables, 13·6 per cent by Belfield's larger and more recent ones, as compared with 9 per cent by the perineal route. So that Belfield† remarks, "Yet the interest of the patient will, doubtless, be better served by a compromise with the requirements of his prostate." Yet, as White‡ says, "the late statistics of suprapubic operations are about equal to perineal in mortality," owing to improvement in the technique. That the mortality is due to the general condition quite as much as to the operation is shown by the smaller mortality (3·8 per cent in cases complicated with calculus where the operation is done earlier. But under the same conditions the perineal operation is much safer.

Furthermore, even if it be granted that the removal of the lateral lobes can be satisfactorily effected through the suprapubic incision alone, the prostatectomy of whatever part can only be done, as McGill himself says, "by leaving a raw surface," unless it is possible to suture the wound, as Tuffier# has done in one case. And it is not only true, as McGill|| says, that "mischievous would undoubtedly result from stagnant urine accumulating in this position," which it must do with suprapubic drainage, but also, as White^ remarks, "the risk of sepsis from exposure of a large absorbent surface is directly increased with the amount of prostatic overgrowth which is removed. In two of the three deaths set down by McGill as directly due to the operation, large portions of the prostate had been taken away, and I have had the same experience." Yet what are we to do? The failures or incomplete results are ascribed to the removal of too little, and the danger increases with the amount removed. Belfield's or Nichols's◇ combined operation, and Cameron's plan before mentioned, appear to offer the best solution of this question.

* *Annals of Surgery*, xiii, 1893, p. 152.

† *Loc. cit.*

‡ *Loc. cit.*

Loc. cit.

|| *Loc. cit.*

^ *Loc. cit.*

◇ *Lancet*, 1894, vol. i, p. 926.

Suppuration in the retro-pubic space, occurring three times in McGill's series of cases, is not only an objection to suprapubic drainage, but, like abscess of the prostate, reported in a few cases and once in von Dittel's* practice, it is an objection to the suprapubic route.

A more important objection is hæmorrhage. Although McGill claims that it is not excessive, because the part removed is not very vascular, and with Hamilton † that it can be avoided by keeping within the capsule and its plexus, yet it is certainly a danger or drawback of the operation—a danger, considering the condition of these patients; a drawback, as removing one advantage, the accessibility to sight, and as necessitating the completion of the operation in the dark. Thus Keyes ‡ remarks, "Most of the work has to be done by the aid of touch, as the bleeding soon becomes free and renders visual inspection impossible." This hæmorrhage may be minimized by employing Trendelenburg's position and substituting two fingers of an assistant for the rectal bag.

Von Dittel and others have objected that the results are not uniform, which is accounted for in part by an incomplete operation or the varying condition of the bladder, in part also by the fact that the simple suprapubic operation is not suited to all cases. But, although White says that the difference in the results can not be numerically compared, Belfield has attempted the comparisons between suprapubic and perineal operations, finding scarcely a perceptible difference. All agree that there are conditions which contraindicate the suprapubic and indicate the perineal route if any—namely, serious mischief elsewhere, and a small, rigid contracted bladder that can not be raised above the pubes.

As many of the above objections do not apply to Belfield's combined method, the conclusion is evident that the latter is the preferable one, though still not universally applicable or advisable. To meet many of the same objections, especially those of hæmorrhage and sepsis, the method reported by Nichols,# and independently by Alexander, was apparently devised, but, although a combined method, it is more perineal than suprapubic.

The PERINEAL ROUTE is seen above to be important as an adjuvant. As a matter of expediency most surgeons are familiar with cases in which the condition of the patient allows no more than a perineal prostatotomy and the use of a large drainage tube.

* *Wiener klin. Wochenschrift*, 1891, No. 29, p. 532.

† *Dublin Journal of the Medical Sciences*, 1891, xcii, pp. 497-500.

‡ *New York Medical Record*, October 31, 1891.

Lancet, 1894, vol. i, p. 926.

As an operation of choice it fulfills the requirements of drainage better than the simple suprapubic, it relieves the obstruction, and furnishes a low-level route in those cases in which it is applicable, and it allows of thorough stretching of the prostatic urethra. As to its advantages, the perineal route is perfectly free from anatomical dangers, and, being quickly performed, involves less danger from anæsthetics. It is safer, nine per cent against 13·6 per cent, and it affords temporary relief in all suitable cases and a radical cure in a fair number. The functional results of perineal operations, according to Belfield's figures, are about the same as those of suprapubic.

Among the objections the most serious is its limitation to those cases only where the "perineal distance" is no greater than the operator's forefinger, which occurs, according to Watson, in two thirds of all cases. The cases with longer "perineal distance" are mostly those with marked lateral-lobe hypertrophy, easily distinguished by rectal touch or by the use of the catheter. Although Moullin says that by the perineal method nothing can or should be done for enlarged lateral lobes on account of the small space and necessary bruising, yet the lateral lobes have been thus removed successfully by Dittel, Landerer, Willett, Wishard, and others, and by the method of Nichols* and Alexander with comparative ease. By the last-named method their removal does not involve a raw surface in contact with the urine. As to the objection that prostatectomy by the perineal route is done in the dark, little can be said, except that the same objection applies in many cases to the suprapubic method on account of hæmorrhage. (The failure of some perineal operations is probably due to the unsuitableness of the case, yet in eleven cases Bruce Clark had to add a suprapubic incision in only two cases, and Wishard has had a similar experience.)

With less danger, the best drainage, and fair results, the perineal route has a certain field of usefulness. Its indications are variously given by different authors, being generally limited to small growths restricted to the posterior median wall, and especially to cases where the bladder is atonic, contracted, or rigid, where there is renal trouble, toxæmia, or advanced cystitis, and, of course, where the perineal distance is not too great.

As the perineal incision does not increase the danger of the operation, and as it is necessary to Belfield's method, we may first explore with the finger and finish the operation in this way if feasible; and if not, a suprapubic incision may be added and the operation completed

* *Loc. cit.*

by Belfield's or Nichols's method. As, according to Moullin, "the difficulty of dealing with the lateral lobes through the prostatic urethra led to von Dittel's operation," we will now briefly consider the method of

LATERAL PROSTATECTOMY.—In this operation diminution in size of the lateral lobes removes both their intravesical projection and their lateral compression. If a median outgrowth is present, this result on the lateral lobes and the resulting cicatricial contraction and subsequent atrophy of the gland will prevent the median portion from acting like a valve by enlarging and lowering the vesical outlet. The median portion may even atrophy and disappear, and thus a "low-level route" would in time, if not immediately, be obtained. Drainage, not equal to perineal, but at least as good as suprapubic, is obtained through the urethra. Thus fulfilling the requirements of the case, it has the following advantages. There is no raw surface left, the mucous membrane being uninjured. It is safe, simple, and effective. It is done under inspection and not blindly, and there is less danger from hæmorrhage.

Many theoretical objections have been advanced, mostly from lack of personal acquaintance with the technique and its results. Thus Moullin * and others say that "McGill's method of enucleation of the lateral hypertrophies through a suprapubic opening appears to obviate by a simpler and presumably a safer way the performance of von Dittel's ingenious 'lateral prostatectomy.' " Eigenbrodt † fears theoretically that "the technique is not easy on account of the narrow space, and in consideration of the many arteries and veins which are here cut." Keyes's ‡ criticism, that "it has been tried and found wanting" by Küster, is based upon an incomplete report of the three cases reported, for a fistula did not remain in all three, but only in two, or perhaps only in one. This occurrence of fistula is mostly a matter of technique, subject to improvement, and it quite frequently results from a suprapubic operation. The other objections are groundless as far as my limited experience goes.

It may well be, as Moullin # says, that "it is not likely that von Dittel's operation will be frequently required." It is indicated only when the lateral lobes are enlarged, and therefore may supplant the perineal method in that one third of all cases where the latter is inapplicable. I would not necessarily limit it merely to cases where the suprapubic method is contraindicated—namely, cases of lateral hypertrophy with a small, rigid bladder.

* *Loc. cit.* † *Loc. cit.* ‡ *Medical Record*, 1891, xl, pp. 525-529.

Loc. cit.

The four operations reported by Nichols,* and an equal number done by Alexander, resemble von Dittel's operation in technique, except that the perineal incision is shorter and therefore gives less room, but the hypertrophy is enucleated and not excised, perineal drainage is used, and a suprapubic incision is added, through which a median projection may be removed if necessary. It may therefore be more generally applicable and consequently more useful than von Dittel's operation.

By one or the other of these perineal operations all varieties of prostatic enlargement may be operated upon; but the operation most generally applicable and giving the best results, but the highest mortality, seems to be at the present time the combined operation recommended by Belfield. Where this is contraindicated, and in other suitable cases, one of the perineal methods may be preferred on account of their lower mortality.

Where lateral enlargement is the most prominent feature, I can recommend lateral prostatectomy as most conservative, safe, and easy.

I add briefly the history of a case where I performed von Dittel's lateral prostatectomy: P. C., aged sixty-two years, entered Bellevue Hospital, October 20, 1891, with retention of urine. Difficulty, frequency, and pain in urination had existed for two years. Prostate uniformly enlarged, as felt *per rectum*. Two suprapubic operations were done by other surgeons, October 26, 1891, and some weeks later. No marked intravesical growth was found. The vesical outlet was enlarged and deepened posteriorly by a V-shaped excision and the use of the cautery. Suprapubic drainage, catheter tied in urethra, but no spontaneous urination followed. Suprapubic fistula remained, and prostate was still felt much enlarged on rectal examination. This case seemed to indicate the trial of von Dittel's method, as the lateral lobes were chiefly involved, the suprapubic method had twice failed, and the patient was anxious for relief. Accordingly, after experimenting on the cadaver, I operated, March 15, 1892, with the patient in Trendelenburg's position to lessen hæmorrhage. Median incision from coccyx to and around the left of rectum and an inch anteriorly. After division of skin and fascia, the upper part of the ischio-rectal fossa was reached by blunt dissection without hæmorrhage, after ligation of only one or two vessels. The levator ani muscle was divided antero-posteriorly on the left side of the prostate, exposing the latter, which was freed by the finger on all sides. The prostatic plexus looked large, but little bleeding occurred on removing two large boat-shaped pieces from the

* *Loc. cit.*

two sides. But little was left of the prostate, and the urethra was not injured. The wound was packed and a catheter tied in the urethra. Recovery uneventful. He was able to pass urine much more freely than before, though a suprapubic fistula remained. Death three or four months later, probably from cancer between the bladder and rectum, though no autopsy was obtainable. The functional result could not be estimated on account of the following peculiarity of the case: From the first operation a catheter could be passed quite easily and fluid injected, but little or no urine or fluid returned, except from the suprapubic fistula. The point of the catheter, I found later, lay in a pouch between the bladder and rectum, the walls of which closed the eye of the catheter, allowing fluid to be injected but not evacuated. The pouch was probably the result either of former catheterization, suppuration, or cancer near the vesical outlet.

So far as it may be justifiable to reach any conclusion from so limited an experience, I should say that the operation is feasible, easy, and safe.

TWO CASES OF TUMORS OF THE SKIN. ONE DIAGNOSTICATED
AS IDIOPATHIC MULTIPLE PIGMENTED SARCOMA ;
DIAGNOSIS OF THE OTHER RESERVED.*

By W. F. BREAKEY, M. D.,

Ann Arbor, Mich.

THE following memoranda of patient's statements are taken from the records of the clinic for diseases of the skin and syphilis, at the University Hospital:

Mrs. M., admitted April 28, 1894; of Scotch nativity, aged thirty-five; married nine years; came from Glasgow six years ago in good health. Father died at sixty-four, of disease of kidneys and dropsy. Mother died at sixty-two, of bronchitis. One sister living at thirty-nine, in good health. Two sisters died; one at four, of scarlet fever, and one in infancy, of measles. One brother died at ten, of typhus fever. The patient knows nothing about her uncles or aunts or grandparents.

Patient has four living children. She has not been well since the birth of the fourth child in June, 1891. Her last babe, born September, 1893, lived only two months, but showed no skin lesions.

The first appearance of any disease of the patient's skin was in

* Read before The Michigan State Medical Society, June, 1895.

October, 1892, beginning on the hands, described by her as "spots," "cracks" and "scales," and "lumps." The affected spots were dark in color, some of them disappearing before the "lumps" came. The



FIG. 1.—Multiple pigmented sarcoma. Showing the general distribution of the tumors.

lumps appeared first upon the arms and then on the knees. "Some quite large lumps went away without breaking."

She was treated two years ago for disease of the uterus by Dr. W. J. McHench, of Brighton, who also removed her right eye in November, 1893.

She was brought to the hospital by Dr. J. N. Swartz, of Hamburg. Her temperature, taken the same afternoon, was 104.5° ; pulse rapid and feeble, and respiration labored.

Her appearance was pitiful indeed. Her clothing was in places adherent to the broken surface of many of the elevated nodular tumors, some of which were broken down and exuding a sticky liquid, apparently serous, and slightly discolored by the admixture of blood. These nodules were also present on the mucous borders of lips and genitals. There was no true ulceration as such.



FIG. 2.—Multiple pigmented sarcoma. An enlarged view of a portion of Fig. 1.

The skin, where not moistened with this discharge, was dry, thick, of an almost boardlike hardness, and a dark, swarthy color. The feet and lower legs presented an elephantiasic appearance, the hands distorted and crippled by the number and size of the nodules. There was

a marked offensive odor from the breaking down of the tumors and the discharge. There were pain and tenderness in the growths, which in some places were like rough plaques of elevated, thickened, horny plates, and in other places conical tumors of all dimensions, from papules to egg size. In other places the skin had a drawn, shrunken, mummylike appearance, its mobility being greatly lessened, and the face—its features distorted by tumors and the loss of an eye—gave an indescribable expression, or lack of expression, sad to behold, which the accompanying photographs, taken a few days later, fail to reproduce. (See Figs. 1 to 4.)

Some opinion had been given, before a thorough examination had been made, that the case was leprosy, and a corresponding degree of excitement among the laity was caused. There was enough resemblance in the nodules of the face and extremities, and the elephantiasis of the feet, to lead several physicians, who had seen numerous cases of leprosy, to think it might be a case of that disease. There was also slight anæsthesia, which had continued for about



FIG. 3.—Multiple pigmented sarcoma. Showing elephantiasis-like condition of the feet.

six weeks, on the inner side of the right thigh, about midway over an area of about one to two inches laterally by five or six longitudinally.

The history, however, of rapid growth, of pain, and the lack of dismemberment of the extremities excluded leprosy, and the diagnosis, made from the history and physical characteristics, of sarcoma was confirmed by microscopical examination by Prof. Gibbes of tissues taken from tumors on the back and thigh, showing round-celled sarcomata.

The patient was first washed with an antiseptic bichloride-of-mercury solution of 1 to 2,000, and next anointed with a mixture of olive oil, four ounces, carbolic acid, half a drachm; and given a tonic of tinct. ferri chloridi with nux vomica, also quinine sulphate and a generous diet.

During the week that she remained in the hospital some small tumors grew to the size of hazelnuts, and others of that size almost wholly disappeared. The temperature came down to nearly normal; her appetite and digestion somewhat improved, but so little encouragement could be given as to permanent gain that she returned to her home on May 4th.



FIG. 4.—Multiple pigmented sarcoma, showing tumors of the hands.

The following letter from Dr. McHench, written about a month after she left the hospital, furnishes additional data as to her history and condition:

BRIGHTON, MICH., *June 4, 1892.*

DEAR DOCTOR BREAKEY: I have no minutes of Mrs. M.'s case, but by referring to my book I was reminded of most that had occurred from prescriptions and dates. I have given you as full a history of the case as I can.

Yours truly,

W. J. McHENCH.

"Mrs. M.—Family history good as far as I can learn, and previous to her present illness has had no severe sickness.

"During the year 1892 I treated her for uterine disease, and about the last of November, 1892, I prescribed for an eczema of her hands, which soon spread to other parts of her body and continued for several months, and I think still exists. While suffering from the eczema there appeared upon the body many colored spots and elevated rings, together with many small skin tumors, which are now seen on her body, and I began to think my case was that of erythema multiforme. These various colored spots and rings soon disappeared, with the exception of the dark color of the skin and the numerous small skin tumors, and then the thought struck me that I might have a case of sarcoma, but I made no microscopical examination, as she did not like to have the knife used on them.

"She was confined on the 2d of September. The child appeared healthy, but did not do well until taken by one of her neighbors and cared for for a short time, but died soon after being returned to its parents.

"The eyes became involved some time in August and in one she suffered much pain, and ulcers appeared in the cornea which soon opened to the anterior chamber with the discharge of the aqueous humor. The other eye did well until the last of August, when symptoms of failure and the severe pain of the first induced me to enucleate to save the second eye, which was done on the 5th of November.

"These tumors of the skin increased in size and number up to the date that you saw her, and for the last few weeks her health failed quite fast.

"I saw her yesterday and find quite an improvement. Many of the ulcerated tumors are nearly gone and others are growing smaller. The color of the skin is much better. Some parts of the face are getting quite natural. She eats well and is taking on flesh, sits up much of the time, is able to walk about the house, and seems quite cheerful."

The further letter of Dr. Swartz completes the history of the case so far as I am able to give it. Unfortunately, no post-mortem was held, nor tissue secured for deliberate examination.

HAMBURG, MICH., November 24, 1894.

Dr. W. F. Breakey, Ann Arbor, Mich.

MY DEAR DOCTOR: Yours received. With reference to the case of Mrs. M., I can not add very much more information to her history. I saw her but a few times after her return; as the distance was so great to her home, I asked Dr. McHench, of Brighton, to kindly look after her. However, under your advice as to treatment she seemingly

showed marked improvement, the strength increased, and the tumors diminished in size. Her face became covered with an eczematous eruption and the skin became very dark, quite suggestive of disease of the suprarenal capsules. In August a very large abscess developed in the right groin which Dr. McHench opened on the 21st, from which a pint or more of *very* offensive pus was instantly discharged. Soon after this, abscesses formed in each axilla. Emaciation was very marked, and death ensued about October 8th.

Hoping these few brief facts will aid you, I remain,

Yours very respectfully, J. N. SWARTZ.

The purpose of this paper is to report the history, so far as it could be obtained, of a somewhat rare and unique case (being fortunate in securing, through the services of Dr. Hall, fairly good photographs), rather than to discuss the pathology in general or the differential diagnosis of sarcoma.

It would take us quite beyond the scope and limits of this paper to consider in detail the various opinions within even the last five to thirteen years of the physical characteristics and minute pathology of sarcoma.

It will be appropriate, however, to take a cursory view of a few of the conspicuous points showing the transitional or evolutionary changes in the standard and current literature on the subject.

In presenting this I quote substantially from Akerman, Auspitz, Councilman, Crocker, Duhring, Funk, Foster, Hardaway, Hyde, Kaposi, Köbner, Paget, Van Harlingen, Virchow, Tilden, and others.

Without comparing immaterial differences, Foster's definition will be accepted, that "sarcomata are always formed from the mesoblast—i. e., from connective tissue in its largest sense."

That sarcoma of the skin grows usually from its deeper portions, and occurs in the form of isolated, clustered, or confluent tumors of various sizes and of somewhat fleshy consistence; that while it may be primary in the skin, it is more often due to metastasis from other parts or organs, and tends to general invasion of glands and internal organs. It may or may not be pigmented, and the latter may be melanotic (the most common form, starting from a pigmented mole or nævus, or from the back or sides of the hands, or from the feet or genitals), or the more rare "idiopathic multiple pigmented sarcoma" which Kaposi is credited with first describing (though both Korte and Köbner had reported cases a year before Kaposi brought the subject prominently before the medical world), and which more immediately concerns us here as the diagnosis given to the case reported.

This so-called pigmentation, however, is due to hæmorrhages into the skin, and Perrin (who collected fifty-four cases and carefully studied sarcoma of the skin, publishing an excellent monograph in 1886) for this reason places it among the non-pigmented sarcomata.

Hyde calls the condition "generalized primary non-melanotic sarcoma of the skin." Cases have been reported also by Vidal, Wigglesworth, Daniver, Hardaway, McKenzie, and others. Funk gives many exceptional cases and many of mild type. The idiopathic form also begins as a rule in the hands and feet, and extends to the forearms and legs, then to the arms and thighs, reaching the trunk and face in two or three years. The tumors are roundish, of shot to bean size or larger, reddish brown or bluish red, disseminate or grouped, painful and tender, never ulcerating (according to Crocker); may ulcerate, according to Morrow, Van Harlingen, and others; having a marked inaptitude for ulceration (according to Hyde). The older tumors undergo disintegration or absorption, or the center only may undergo involution with desquamation of the epidermis, leaving dark, pigmented spots and cicatrices.

Funk says in some cases a diffuse elephantiasislike thickening of the extremities, especially of the legs, occurs to such a degree as to make the limbs distorted and stiff; and when the hands are also affected the patient is helplessly crippled. When the trunk is affected the whole cutaneous surface may be involved; the skin and subcutaneous tissue are intensely infiltrated, hard as a board, immovable, with a nodular surface, and of a dark violet-brown color.

Hyde calls attention to the fact that these tumors are fewer in number and smaller in size as they spread from the distal to the proximal parts of the limb. Crocker says erosions occur on the surface of the tumors, exposing a blood-infiltrated tissue which may become watery or fungoid from irritation, and hæmorrhage occurs frequently from the dilated vessels near the nodules. The foregoing description might have been written for this case. According to Funk, the neoplasms of the mucous membranes break down still more quickly than on cutaneous surfaces. Post-mortem examinations reveal similar tumors in the viscera, particularly in the descending colon, where they tend to slough.

The disease extends by metastasis to internal organs. (Councilman calls attention to the fact that the path of the metastasis is almost always along the blood-vessels, the sarcoma in this again contrasting with the carcinoma, in which metastasis follows the lymphatics.)

Marasmus, cachexia, or sepsis mark the rapid progress of this stage and hasten the well-nigh inevitably fatal termination in from three to

five years; though young persons may succumb in the first or second year, while older people have survived the ravages of the disease from six to twelve years, and a few recoveries have been recorded. Funk and Hardaway report the complete recovery of a case, and McKenzie's case recovered even after the amputation of a leg.

The discrepancies in this somewhat wide range of opinions of conditions and severity of the disease may perhaps be explained in part by the probability that different authors have described the characteristics of the cases they have seen, which have varied in gravity, in stage of development, and individual peculiarities. Councilman says the growth and the general clinical characteristics of the sarcomata are so different in the several forms that we can find in this group of tumors representatives of completely benign as well as of the most malignant growths; in this regard the separate varieties of the tumor have individual characteristics. The pigmented sarcomata may be regarded as the most malignant of tumors, not only on account of their local destructiveness and rapid unlimited growth, but also from their tendency to form metastases. The benign period of the development of a sarcoma is shown by its slow and circumscribed growth. In this early benign period the entire tumor is often inclosed by a connective-tissue capsule. The clinical importance of a sarcoma does not depend altogether upon the histological structure. The power of the sarcoma to produce secondary metastatic nodules in the most different organs is not confined to any special species, though some show a much more decided tendency in this direction than others. In some cases the secondary nodules are of such small size and appear in so many places in the body that the condition is known as sarcomatosis.

In diagnosis this form of sarcoma is to be differentiated from fibroma, epithelioma, gumma, lupus, palmar and plantar syphilides, tuberculosis cutis, from mycosis fungoides, and from lepra. The ease or difficulty of diagnosis must depend much on the stage of the development. In the limited opportunities I have had for comparison it seems to me that of all these similar diseases, including Kaposi's lymphoderma perniciosum as well as what Foster calls the granulomata of the skin—the chronic infectious dermatoses—sarcoma cutis is most likely to be confounded with mycosis fungoides. Multiple pigmented sarcoma may be differentiated from lupus by its more rapid evolution, lack of ulceration, as well as by its history and the number and location of lesions, and by microscopical examination. Syphilis ought to be detected by the number, appearances, and size of lesions, as also by its history, tendency to spontaneous improvement in the early stage, and curability by proper and specific treatment. Some rare forms of lepra

do indeed suggest sarcoma, but the history and the presence or absence of hyperæsthesia or anæsthesia, bullous lesions, or deforming mutilations in the advanced stage will usually determine the diagnosis. Fibromata and epithelioma should be comparatively easily recognized.

But mycosis fungoides and multiple pigmented sarcoma have many symptoms in common; both are rare. The facts as to prevalence, age, and sex, even infection and micrococci, are not so positively determined as to leave no room for doubt.

The diagnosis, made from history and physical appearances, was confirmed by microscopical examination. Yet, while the physical characteristics of pigmented multiple sarcoma cutis were present in the condition of the skin in most of the tumors, and the microscope showed round-celled sarcoma, still there was enough doubt in the case to raise the question, Was this only generalized sarcoma? Was there mycosis or granuloma fungoides, or is there a mixed type? May mycosis fungoides occur coincidently with sarcoma, or develop particularly in the broken-down nodules?

Hardaway says a case reported by himself some years ago, under the title of Multiple Tumors of the Skin accompanied by Intense Pruritus, is regarded by some as an example of mycosis fungoides, but adds that if the case represented this affection it is worthy of note that, at the date of observation, 1880, the disease had already existed for twenty-one years. His description of the history and physical characteristics of mycosis fungoides corresponds very closely with that of those of sarcoma cutis.

Perrin, Funk, and others regarded mycosis fungoides as a species of sarcoma of the skin.

Under the title of Inflammatory Fungoid Neoplasm, Duhring and Geber have described a disease of the skin closely related to sarcoma, in which both spontaneous involution and ulceration may occur.

From a very brief and incomplete history of this case and inspection of the photographs of the subject of this report, Duhring expressed the opinion that the case seems to have much in common with granuloma fungoides, and that it would be proper to exclude that disease before regarding it as sarcoma; also that the microscope is hardly sufficient in itself to determine the diagnosis.

Yet it would seem that the diagnosis of granuloma could only be determined by the microscope. Hyde says the diagnosis of sarcoma rests upon the microscopical examination of the new growth in every case.

The micro-organisms of mycosis fungoides have been recognized by Rindfleisch, Auspitz, by Hochsinger and Schiff; also by Firket, of

Liège, who reported a case illustrated by photograph, in which micrococci were recognized.

Tilden, however, in a very full monograph under the title of So-called Mycosis Fungoides, makes report of thirty cases (twenty-three patients were males and seven females) and sixteen deaths. More than half the whole number were over forty years of age. Tilden found no micrococci in the case examined and doubted their existence, and calls attention to the fact that Rindfleisch and Auspitz both within the same year by the same methods found micro-organisms in pathological products of mycosis similar to those found in lepra, lupus, tubercle, and syphilis, but materially disagreed as to tissues in which they were found. Van Harlingen states that the existence of the coccus detected by Rindfleisch has not been confirmed by other observers.

Hyde, however, thinks there is now little question as to the infectious character of mycosis, and that it is probably produced by a specific micro-organism. But Tilden says there is no instance of the malady having occurred in more than one member of the same family.

Councilman emphasizes the distinction that all granulation processes tend to the formation of tissue. In sarcoma there is no tendency to the production of tissue, but simply to an increase in the number of cells.

Van Harlingen, speaking of mycosis, says the diagnosis is extremely difficult, if not impossible, and that sarcoma of the skin is the affection with which mycosis has been most frequently confounded, and many undoubted cases of mycosis may be found described under the designation of sarcoma. However, the facts that sarcomatous tumors are never preceded by eczemaform or "lichenoid" congestive eruptions; that the color of the skin is but little changed; that there is no itching, but that there is pain; and that there is no resorption, the tumors disappearing only by ulceration (?)—all point to a marked clinical difference between the diseases.

Moreover, the evolution of mycosis is more rapid, and neither sarcoma, epithelioma, nor carcinoma gives rise with such rapidity to voluminous soft brick-red tumors, like raspberries or tomatoes; . . . also that microscopical examination of a tumor will show the presence of lymphatic globules and the peculiar reticulum characteristic of mycosis.

From the foregoing opinions, which fairly represent authorities, it will be seen that the differential diagnosis of idiopathic pigmented multiple sarcoma of the skin and "mycosis fungoides" is neither easily nor certainly determined as yet by standards heretofore accepted as established.

Since writing the foregoing two days ago, the following case was sent me by Dr. F. N. Dewey, of Plymouth, Mich. It supplements the first one in so many particulars and illustrates so many of the



FIG. 5.

physical characteristics of mycosis fungoides, while the microscopical examination made by Prof. Dock shows sarcoma cells only, as to exhibit a valuable contrast whether the two cases be regarded as the same or different diseases, and I therefore add a hasty memorandum of the case so far as it can be reported now.

Mrs. S., aged fifty-six; Prussian, married thirty-one years, mother of two children, housekeeper on farm; no hereditary or specific trouble known in family; some trouble or injury at childbirth (gave birth to twins over twenty years ago); and subsequent treatment.

First appearance of skin lesions was six years ago, at beginning of menopause, on backs of hands and feet—first “red spots,” no “pim-

ples," which gradually spread all over the body, sometimes scaly, always itchy, never ulcerating.



FIG. 6.

These spots nearly all disappeared in the course of about two years, and the patient remained almost well for the next two years. Then the "spots broke out" again nearly over the whole body at once, and

have been better and worse since. The growths were more numerous and larger, she thinks, about two or three months ago than at any other time, and causing her more distress.

Many of these large tumors have grown in from two days' to two weeks' time; and other tumors half the size and thickness of the hand have disappeared in a week.

Patient has better health now than a month or two ago. She does considerable outdoor work—takes care of chickens and milks (!) a cow. Her hands have never been disabled for work. Her wrists and forearms, feet and legs show erythematous spots, becoming elevated nodular tumors as they approach the elbows or knees, not tender nor painful. There are some stains and scaly spots on wrists, feet, and legs, and



FIG. 7.

other parts of body where the lesions have almost wholly disappeared. "A boil" or some soft tumor in bend of left elbow was cut open last summer, and gave exit to a bloody discharge. There is now an irregular

multiple nodular mass in the same place, deeply fissured across in bend of elbow, and exuding a serous discharge. Some few others of the tumors, more elevated or more exposed to friction, show erosions, from which reddened hyperæmic surfaces a more bloody oozing is going on.

There are enormously large multiple, nodular masses in the axillæ—in the groins involving glands (Fig. 5)—on thighs and lateral parts of lower abdomen, and the back (Fig. 6), chest, and trunk are almost covered with elevated, flattened, oval or leaf-shaped tumors, from the size of a finger nail to the palm of the hand, and elevated one quarter to three quarters of an inch from the surface. A small section removed from the back showed round-celled sarcoma. Some seborrhœa with numerous small comedones were found in regions near tumors.

The specimen of tissue examined was very small, and insufficient for thorough examination. It is hoped that facilities for a further examination may be had, and the patient kept under observation so as to procure the subsequent history.

The salient points of difference in physical conditions, patent at a glance at the photographs, are the great number and size and nodular character of tumors on extremities in the first case; the elephantiasis-like condition of feet and lower legs, the dry, hard, darker-colored skin, the tenderness and pain, the shorter history and more rapid progress of the first case; the absence of tumors on the extremities of the second case, though there had been papules, vesicles, and small nodules on feet, leaving scales and large macular cicatrices (Fig. 7); the absence of pain or much tenderness, but constant pruritus; the more flattened shape of tumors, and the marked prominence of the glandular involvement; the soft, reddish color of tumors and the moist condition or lack of dryness of skin, and the ability of the patient to be on foot and do so much work with her hands.

The points of resemblance are the facts of both beginning in the hands and feet, the spontaneous improvement at times and retrogression, the rapid growth of tumors and equally rapid resorption, involution, or disintegration, and the absence of anything like typical ulceration.

Should the diagnosis of the late case be made now on physical conditions and history, it would be called, I think, mycosis. Should it be made on the microscope alone, it must be sarcoma, unless we accept a mixed variety. Trusting to reach a more satisfactory determination by further observation—and as it will make no difference in treatment—the diagnosis is held open.

ON SOME AFFECTIONS OF THE NERVOUS SYSTEM OCCURRING
IN THE EARLY AND LATE STAGES OF ACQUIRED SYPHILIS.

By JOSEPH COLLINS, M. D.,

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St. Mark's Hospital.

[CONCLUDED FROM PAGE 297.]

ASIDE from the cases of organic nervous diseases due to syphilis there are a considerable number of patients who suffer from nervous symptoms which have no apparent pathological state on which they are dependent, but which are attributable to a recent or ancient specific infection. The occurrence of this class of disassociated nervous symptoms, called neurasthenia, in the early and later stages of syphilis has recently been emphasized by Fournier (*Les Affections parasymphilitiques*, 1894).

Care must be exercised in classifying as syphilitic all the functional nervous symptoms occurring after infection. In fact, greater discrimination is necessary to detect the relationship between syphilis and functional disease than between syphilis and organic affection.

The functional diseases associated with syphilis may be classified into (1) those referable to the mind and (2) those referable to the nervous system; or, in other words, to the psychical and the physical parts of the nervous system, psychoses and neuroses. Comprised under the first or psychical are (1) the different phobias or anxiety conditions, and (2) hysteria and hysteriform states; under the second is neurasthenia. It may be well to say in this connection that the word neurasthenia is not used here in the colloquial sense, as including in a very obscure way all sorts of symptoms and ill feelings which can not be attributed to actual disease of some organ, but as a definite symptom complex, associated with certain variable somatic accompaniments—motor, vaso-motor, and secretory—which indicate exhaustion, centrally or peripherally, which is not commensurated by repair—that is, weakness and excessive irritability of the functioning centers or a disturbance of a relation between muscle and nerve irritability. The term neurasthenia has barely avoided the stigma of reproach which formerly was universally associated with hysteria, and this because physicians have been willing to accept and use it as synonymous with nervousness.

Without entering into a discussion of neurasthenia *per se*, I desire

to enumerate some of the leading symptoms which occur with such unvarying persistency that they may be considered the groundwork of the symptomatology of every case. They are pain and peculiar impression feelings in the head, vertigo, inability to do persistent mental work, disturbed sleep, variability of temper, inability to take stimulants even in small quantities, erethism, pain in the back, cardiac palpitation, varying perversion of sensation, and myasthenia.

These are merely the outlines of the clinical picture, which varies in every patient with his nature, his temperament, his peculiarities, and particularly with the severity of the disease. The predominance of one set of symptoms in any individual case, such as the cerebral, the spinal, the sexual, the cardiac, the neuralgic, gives each case a certain individuality.

The objective symptoms, of which the recognition and knowledge is very important, and which should always be sought for before making a diagnosis, are (1) vaso-motor disturbances, which manifest themselves by repeated alterations in the caliber of the blood-vessels, and consequent pallor, flushings, and thermic sensations; (2) inequality of the pupils, but with preservation of contraction to light and accommodation; (3) liveliness or exaggeration of knee-jerk; (4) fine tremor of the extremities, especially the hands; (5) increased glandular secretion, frequently of a "paralytic" type, especially of the glands of the skin; (6) polyuria and the frequent occurrence of excess of phosphates and oxalates; (7) increased rapidity of the pulse and occasionally evidences of pre-senility in the arteries; (8) the outward manifestations of gastric disturbances which so frequently accompany neurasthenia; (9) changes in the blood, the precise nature of which is not yet known. Syphilis may be an extremely energetic, predisposing cause of neurasthenia, or it may be the one exciting factor. It predisposes to and causes neurasthenia, quite as do other ætiological factors which we know to be responsible for its being, by (1) leading to defective nutritional states of the protoplasm of nerve-cells; either directly or secondary to changes in the blood. That syphilis causes marked changes in the blood has been proved by abundant observation. According to Martin and Hiller (*Medical News*, Philadelphia, 1890), during the secondary manifestations of syphilis and while mercury was being administered, there was marked diminution of the red blood-corpuscles and a change in the contour of many of the red blood-cells. This diminution in the number of red blood-corpuscles has been pointed out most explicitly by Wilbonchewitch (*Archives de phys. normale et pathologique*, 1874), by Letzius (*Blutveränderungen bei der Anämien der Syphilitischen*, 1889), and by many others. Selenew and Stoukownikoff have shown

that not only the red blood-corpuscles are diminished in number, but that their oxygen-carrying power in the beginning of the disease, and often later on in its course, is seriously diminished (*Annales de dermatologie et syphiligraphie*, 1892). The ulterior result of such vascular depravity on the nervous system needs no emphasis. (2) By auto-intoxication, the result of increased katabolic and diminished anabolic processes, and resulting impoverishment of the blood and insufficiency of tissue oxygenation; and (3) by causing changes in the walls of the blood-vessels which in turn lead to perversions of nutrition. That such changes go on in the vessels as the result of syphilis is a fact so universally conceded that it requires no discussion. The syphilitic poison itself frequently gives rise to such conditions, but not rarely the drugs which it is necessary to use in extremely large doses for their curative powers in syphilis have a hæmolytic effect on the blood and a similar influence on nutrition, and by virtue of these lead to neurasthenia while curing the syphilis. The consensus of opinion of those who have studied the effects of mercury on the blood is that when it is given in very small doses and for not a very extended period, the red blood-corpuscles are increased in number, the ratio between the colored and colorless corpuscles is preserved, and that the weight of the blood is increased. When, however, mercury is given in larger doses and continued for several weeks or months, when in fact mercurialism or a continual tendency to it is produced, then the effects upon the blood are quite the reverse of those just mentioned. When neurasthenia is due to the syphilitic poison, it is an early manifestation, while if it is due to the infection plus the effects of heroic treatment, it is apt to occur at a period more remote. The evolution of neurasthenia as the result of luetic infection is generally a gradual one, and several factors participate in its production. Such are those referable to the physical results produced by the poison through its debilitating effect on the blood and blood-vessels, and, second, those which act through the psychical sphere. Whether or not any of these factors alone will be sufficient to produce neurasthenia will depend on the intensity and virulence of the poison and the condition of bodily nutrition at the time of infection. Both of these are very important, and especially the latter. If the blood of a patient who is so unfortunate as to be infected with syphilis is depraved from enervating habits, overwork, previous illness, excesses of any kind, his nervous system will not tolerate, without manifestations of irritability and exhaustion, the burden thrown upon it.

In young patients, and in those who are by nature or inheritance introspective and of a neurotic constitution, the chagrin of being

afflicted with a loathsome disease, the fear of its non-amenability to treatment, the despair of its being discovered by their intimates or family, all tend to cause serious depression and shattered *morale*, which in turn is reflected in the nutrition, and particularly the nutrition of the nerve centers and nerves. It is undoubtedly within the experience of every physician who has seen anything of syphilis to have had experience with such cases, and it is therefore unnecessary to quote illustrative cases. The recognition of the disassociated symptom complex of neurasthenia is not difficult, but the danger is that the physician will not take into consideration its dependence on syphilis, or, on the other hand, that he will not take it seriously. The fact that a neurasthenic should be handled with just as much precision and care as a patient suffering from typhoid fever has not yet appealed to the profession in general. The clinical forms or types which neurasthenia syphilitica may take are just as numerous as different manifestations of neurasthenia of other origin, and do not require special description here. Nor do they differ much in point of prognosis and treatment from neurasthenia arising from other causes. Neurasthenia, from whatever cause, does not tend to shorten life, but it does tend to make the possessor supremely miserable. Its course is a variable one, attended with frequent remissions, followed by exaggeration of symptoms without assignable cause. The most important factor in determining the prognosis is the duration of the illness. Those of short duration generally respond readily to treatment, and *vice versa*. Neurasthenia does not eventuate in organic disease, such as tabes and general paresis, except in so far as it tends to further deprave nutrition and increase the vulnerability of the nerve tissue to the toxic products of syphilis.

The symptoms purely psychical occurring during syphilis and depending on it are of much more rare occurrence and of much less importance than neurasthenia. We shall therefore content ourselves with mere mention of these conditions. As was previously mentioned, they are various "phobias"—fear of being incurable, fear of being unable to take mercury or the iodides, fear of impending serious disease, such as paralysis, blindness, locomotor ataxia, and so on to an appalling extent. These may be regarded as hysteriform phenomena, inasmuch as they are developed out of psychical shocks and depend on mental representation. Hysteria in any of its protean manifestations may arise during syphilis and be caused by syphilis just as it is often called into being or activity by acute disease or exhausting and depraving influences. In fact, if it be conceded, as I believe it should be, that hysteria is a mental disease; that the most important element in its genesis is a degenerate inheritancy, and that its real ex-

citing factors are psychical trauma, we can the more easily understand how syphilis leads up to it. If the somatic nutrition is in a plus condition, psychical trauma may like physical trauma be received up to a considerable degree of severity without noticeable results in the way of departure from psychical or physical health. In a body whose nutrition has been impaired and put in a minus state by syphilis, or by too energetic treatment, slight psychical influences may bring into activity a disease, a perversion which is inherited or latent. In this country hysteria is an extremely rare disease when contrasted with the frequency of its occurrence in France, for instance, and its association with syphilis is therefore among the most uncommon.

Diagnosis.—We have said that syphilis, as it affects the nervous system, causes symptoms very like those produced by other causes, and indeed, with the exception of the syndrome that has been described by Erb, we can not nosologically consider syphilis of the nervous system as a separate entity. The necessity for the diagnosis of syphilitic nervous affections is the more urgent because of their readier response to treatment than lesions of different constitution presenting similar symptoms.

The factors that should influence most in making a diagnosis of syphilitic disease are: Has the patient had an initial lesion? It is nothing less than astonishing when we consider how many patients deny knowledge of an initial lesion at first, then afterward, when confronted with proof of such infection, recollect the possession of it. A considerable number deny honestly a luetic infection, but others, and especially women, take every precaution to conceal it from the physician, and this for many reasons which are not necessary to detail here. The larger proportion of patients who have had a chancre and who fail to give an account of it to the physician are: (1) those who have had a sore and received but desultory and indifferent treatment; (2) those who have acquired the disease in a manner out of the ordinary; (3) those who have been infected, treated, and discharged cured. Patients of the latter class are entirely incapable of appreciating any significance of the previous possession of a chancre, which was never taken *au sérieux*, in connection with their present trouble, removed as it is from the period of primary infection by a number of years, and therefore they often answer the question of having had syphilis categorically in the negative.

In fact, they are no more capable of attaching any significance to an antecedent chancre than was a patient who recently consulted a prominent surgeon for a fracture of the humerus, who, on being asked if he had ever had syphilis, retorted that it was none of his business, then

departed forthwith in a state of high dudgeon. There are unquestionably a number of patients who have had a chancre, which has given them little or no trouble, and they have forgotten it, as they would forget an attack of bronchitis. The truth of this statement can be verified easily by any physician who has occasion to make many autopsies on cases previously under observation in whom leutic infection had been denied. The stellate radiating cicatrices of the pleura, the diffuse interstitial hepatitis, and the numerous evidences of visceral syphilis furnish incontestable proof of ancient infection, the most strenuous denial to the contrary notwithstanding. Although the history of an initial lesion should be allowed due weight in leading to a diagnosis of nervus syphilis, yet it must be conceded that the diagnosis must be often made without such history, and particularly on the following grounds: 1. If the patient presents or has presented certain cutaneous conditions which are peculiar to syphilis, such as the serpiginous syphilide (*la signature de la syphilis* of Ricord). 2. Certain bone affections apart from any history of trauma, such as localized periostitis, perforation of the nasal septum, of the palate, etc. 3. Cutaneous and mucous cicatrices which we know to be most commonly produced by syphilis, and adenoid hyperplasia, particularly of the post-cervical and epitrochlear glands. 4. History of repeated premature births in the patient's family. (Birch-Hirschfeld has shown that two thirds of all the cases of miscarriage syphilis is responsible for, are the result of an affection of the blood-vessels of the placenta.)

There are certain peculiarities in the mode of onset and course of syphilitic disease which, although not pathognomonic, are of the greatest service in contributing to the establishment of the diagnosis. These are, first of all, pain, cephalalgia, rhachialgia, more or less continuous, but worse at night. Transitory symptoms which almost always recur, such as a transitory monoplegia, hemiplegia, or convulsions, and, as was stated in a previous part of this article, the occurrence of most severe symptoms, such as coma, which are followed by rapid amelioration; then, again, the ability to exclude other causes of the disease, such, for instance, as trauma, previous infectious disease, and cardiac affections in a young person who has hemiplegia; multiplicity of symptoms, indicating disease of widely separate regions of the nervous system and regions that have no anatomical contiguity or particular physiological relationship. Certain ocular symptoms are very significant of syphilis without being absolutely pathognomonic. They are particularly recurring paresis of the motor oculi nerve and difference in the pupillary condition of the two eyes. Buttersack (*Arch. f.*

Psych. und Nervenkr., 1886, xvii, 3) has observed that reflex pupillary immobility, intermittent in character, is very significant, and this observation has received full corroboration from other clinicians; but it is not possible to lay down any severe dictum as to the absolute conditions of the pupil which would point to a syphilitic nervous affection. When it is said that there is some paradoxical pupillary condition, such, for instance, as a contraction in the dark and a dilatation in the light, when one pupil reacts more indifferently to light than does the other, and other manifestations of pupillary asymmetry, that is all that can be conceded. In reference to the information obtainable by the ophthalmoscope which will lead to a diagnosis of syphilitic affections of the nervous system, Ostwald (*Berlin. klin. Wochenschr.*, 1888, No. 45) has noted that when the vessels of the brain are diseased not infrequently a similar degeneration can be found in the vessels of the choroid, and this can be determined ophthalmoscopically. The therapeutic test is probably the least important of all, for unless the manifestations of lues in the nervous system be the result of a moderately recent infection, say, within three years, the results to be obtained by treatment are not striking. And at the same time it should be remembered that the drugs which are considered antisymphilitics are possessed of antiphlogistic properties, and furthermore are the most potent measures in the treatment of nervous disease, which have neuroglia proliferation and consequent destruction of nervous elements for their pathological basis and which are nonsyphilitic in origin. In a general way it may be said that in the diagnosis of syphilis of the nervous system the facts stated by Hughlings Jackson fifteen years ago (*Lancet*, 1880)—“In certain cases of nervous affections, in which the existence of previous infection is difficult to determine, because of the negative results obtained from the antecedents of the patient or an objective examination, we are often able to affirm from the course of the disease and the character of the symptoms that the organization has been infected by syphilis, and that the disease is syphilitic”—hold true to-day.

A CASE OF DERMATITIS EXFOLIATIVA NEONATORUM.

By DAVID KIRK WHITE, M. D.,
Cleveland, Ohio.

THE extreme rarity and unusual fatality of the disease described and identified by Ritter von Rittershain render the report of all such cases of considerable importance, as well as any additional light which may be thrown on the ætiology of the disease.

With these objects in view, I desire to place on record the case of baby W., male, fifth child, born February 25, 1895, of healthy but somewhat nervous, excitable parents, giving no history of any hereditary taint whatever. The child was well nourished and performed all physiological functions normally. The umbilical cord sloughed off in five days, the umbilicus healing without further trouble three days later. The sanitary surroundings were not good; the child, however, received good attention, was properly washed, well dressed and cared for in every particular. Ten days after the birth of the child the draught damper in a hard-coal stove in the child's room was carelessly closed tight, causing a very noticeable amount of gas to escape in the house—sufficient, indeed, to cause the mother, who lay in an adjoining room, to have marked dizziness, followed by a violent headache lasting for almost twenty-four hours afterward. In the child were noticed drowsiness, bronchial irritation, and lividness of the skin. The house was promptly cleared of the gas, and no further immediate deleterious effects were noticed. Two days after this incident the child's forehead and face became the seat of a dark-red eruption, followed secondarily by numerous minute sudamina, and thirdly by complete exfoliation of the epidermis covering the affected areas, and within from forty-eight to sixty hours the entire body and limbs were implicated in some stage of the diseased process in the order named. Flakes of epidermis as large as a Columbian postage stamp could easily be detached, by mechanical means, from the body and limbs, while without interference it was shed in much smaller segments. Four irregularly shaped bullæ formed on the anterior aspect of the body, and appeared to be simply the result of friction between the loosened epidermis and the inflamed rete beneath. A secondary squamous exfoliation took place from the body alone, consisting of dry, bright, silvery-white scales, generally about one centimetre in diameter, their original outlines having been marked by fissures which were obliterated in the desquamation. The disease extended much more rapidly on the face and body than on the limbs, and the main severity of the case was shown on the body. There was no perceptible amount of moisture noticed at any time in the history of the case, excepting the bullæ. Neither was the disease preceded by any unusual dryness of the skin. The mucous membranes were not affected, save a slight conjunctival injection with little exudation. The advent of the disease was unheralded by premonitory phenomena, nor did the system recognize its presence by any marked departure from the normal. The pulse and temperature were found by repeated examinations to be not far from the limits of health. The child greedily took its nourishment, slept soundly, and only

evinced signs of discomfort or pain at being washed or handled, while the disease was at its height. In the earlier part of affection there was a slight ammoniacal odor from the urine. The bowels acted regularly, the fæces presenting no evidence of any disturbance of the digestive organs. The case yielded readily to treatment in fourteen days, consisting of a bath of a warm boric-acid solution, followed by a thorough application of an ointment of zinc oxide and bismuth subnitrate in lanolin, which was replaced later in the disease by one of ichthyol in lanolin.

Up to the present date there have been no signs of a relapse or evidence of untoward sequelæ.

I have little to say in regard to the ætiology of the disease. No attempt was made to discover the fungus of Riehl. Since the gas from the hard-coal stove was the only recognized source of irritation the patient was exposed to, attention is necessarily directed to that fact. Whether the inhalation of the carbon monoxide could be a factor, in part or *in toto*, in the ætiology of this disease of the skin, even in the already susceptible skin of an infant not yet fully through the physiological desquamation incident to the age, either in the production of a dermal asphyxia by intercepting the supply of oxygen, or in the production of a dermal syncope brought about through the agency of the vaso-constrictor nerve centers in the cerebral hemispheres or not, is a question. While the parasitic theory of Riehl is probably the most acceptable of the day, it must be admitted that peculiar and rare internal or external conditions are necessary for its development. If the carbon monoxide or the effects of its presence in the blood were not the direct cause of the disease, it evidently furnished conditions favorable to the growth of the fungus.

2 Bolton Avenue.

TINEA CIRCINATA PRESENTING TWO RINGS.

By J. ABBOTT CANTRELL, M. D.,

Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for Graduates in Medicine; Dermatologist to the Philadelphia Hospital and to the Southern Dispensary, Philadelphia.

IT having been the recent pleasure of the writer to witness a case of circinate ringworm in which two separate rings were presented to view, it was thought that it may prove interesting to others, so peculiar was the circumstance. According to the literature of this subject, several such examples have been witnessed by former observ-

ers, and a list of these, with a few remarks upon each, will be found at the end of this paper.

The case herein recorded came to my clinic at the Southern Dispensary on April 13th of the present year. It happened in a girl nine years of age, who was accompanied by her father, who answered all questions. She was of American birth, although of Russian parentage, and it was stated that neither she nor any of her brothers or sisters or either parent had ever suffered from any skin disease whatsoever. The patch of disease in this instance had existed for the previous two weeks, it having been without treatment of any kind. It was situated upon the left side of the chin and slightly below the angle of the mouth. The whole patch was an inch and a half in length and one inch in breadth. It consisted of two rings, one within the other, and not in the least connected one with the other. The larger ring had a diameter of an inch and a half, while the smaller was only about one third of that size. The peculiarity of the condition was that each lesion or each ring seemed to be made up of vesicles, some of which had broken down, showing fine crusts. Throughout the entire patch the condition was one of slight redness, although not of an acute character. These two lesions, although being placed as an inner and outer ring, are not connected with one another, both being distinct and with marked and abrupt edges.

Unna (*Vierteljahrschrift f. D. und S.*, vii, 1880) refers to a similar condition occurring in a girl of eleven years of age, in whom the lesions were encountered upon the back, being composed of three rings. Unna thought that the reason of the disease appearing in concentric circles was because it was so situated that the child was unable to scratch the patch, and thus the condition was allowed to proceed and to form the rings; but a case has been recorded by Arning (*Vierteljahrschrift f. D. und S.*, x, 1883, p. 98), occurring in a female and observed upon the right forearm and to be made up of four concentric rings, while the same condition was witnessed upon the left hand of the same patient having two circles, and, although in a position that was easily scratched, the condition supervened, and likewise in the case herein recorded the patch, having occurred upon the chin, was in an accessible place for the scratching of the child, but the condition was observed in rings. This peculiar arrangement of the lesion may be produced by a somewhat rapid growing parasite, or the soil may be an inducing factor.

315 South Eighteenth Street.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Treatment of Psoriasis by the Extract of the Thyroid Body.—The few attempts which have been made in France by this method of treatment have given the most variable results. For my own part, I have seen it result favorably in only one instance, in a patient in private practice who had a psoriasis proving most rebellious to all local treatment, and in which the eruption was greatly improved under the influence of the ingestion of pastilles of thyroid extract. When he ceased to make use of the remedy the eruption took on all of its original intensity, but retroceded when he began its use again. On the other hand, I have entire unsucces, and in fact accidents of quite a serious nature, so that I was obliged to interdict the use of this substance for my patients. Dr. Messeau has just caused to appear in the *Transactions* of the Polyclinique Dermatologique de Bordeaux, directed by Dr. Dubreuilh a most interesting memoir, in which he reviews the principal works published upon the question, and in which he reports four observations collected by himself from the service of Dr. Dubreuilh. In the first two cases the treatment was carried out by means of pastilles of the thyroid body. It was continued for about a month, without the least result in cases of severe psoriasis. In the third case (very light and recent psoriasis) the extract of thyroid juice was used, and at the end of a month and a half the amelioration was only very mediocre, when local treatment was instituted. In the fourth case (psoriasis of severe and rebellious type), the natural thyroid body was given fresh. The first ingestion determined a violent *malaise*, with febrile movement and violent diarrhoea; at three other times the attempt was made to give thyroid body, but the same general symptoms were each time reproduced and it could not be continued. The author concludes that we can not regard the treatment by thyroid body as a specific for psoriasis.

On the Nature of Lupus Erythematosus.—We all know how much this subject has been discussed. Certain dermatologists, at whose head is to be found Dr. E. Besnier in France, claim that lupus erythematosus is always of tuberculous nature, or, to speak more accurately, bacillary. Most authors think, on the contrary, that it is a special morbid process, a condition *sui generis*, having no relation with bacillary disease. I have observed for my part, over a period of several years, a patient, who for a long time has been affected with lupus vulgaris non exedens of the face, of the most rebellious kind, so far as all medication goes, either general or local, having an extending though gradual march. This patient presented at the same time lesions of typical lupus erythematosus of the fingers. When he was given iodoform, the eruptions of the hands disappeared at the end of a certain time, to reappear when the drug was withheld. It seems, then, that there were elaborated at the site of the lupus vulgaris toxines which poisoned little by little the organism and provoked eruptions of the extremities. The iodoform appears to combat this intoxication. The patient died quite recently, with manifestations of general infection analogous to those which are provoked by injec-

tions of Koch's lymph administered in large doses. This most interesting case seems to confirm the theory that I advanced several years ago on the nature of lupus erythematosus of the superficial aberrant form. I consider it as being a veritable erythema of an origin nearly always infectious. In most cases it is tuberculous infection, the penetration into the economy of the toxins of tuberculosis which provokes the apparition of centrifugal symmetrical erythema (lupus erythematosus superficialis aberrans), and hence we can understand how one may see coexist in the same individual a lupus vulgaris and a fixed lupus erythematosus with a superficial wandering erythematous lupus. But on the other hand there are cases in which it appears quite difficult to incriminate tuberculous infection as a pathogenic cause of superficial lupus erythematosus, and the whole evolution takes place in these patients just as a passing infection of little gravity would, or as vasomotor troubles connected with puberty, menopause, uterine affections, gastro-intestinal diseases, and divers intoxications, etc. Now we admit for lupus erythematosus, which we consider as an erythema, absolutely the same pathogenic theory that we admit for the other erythemas—that is to say, we believe with Dr. E. Besnier that it is the *individual condition* which plays the important rôle and which determines the form the eruption assumes, according to which the skin reacts when it is solicited by this or that morbid cause. It is not difficult for us to admit that the provoking causes of lupus erythematosus aberrans may be multiple, and are for the most part the infection of the economy by the toxins of tuberculosis, occasionally of other morbid trouble of neuro-vascular nature. Thus regarded, lupus erythematosus becomes a sort of objective syndrome of multiplex pathogeny, analogous to scarlatiniform erythema, to polymorphous erythema, to urticaria, etc. Besides, the results of therapy confirm these theoretical ideas. Nothing is more capricious, indeed more inconsistent in its way of reacting to various remedies given internally or applied externally, than lupus erythematosus. Iodoform, creosote, phenic acid among antibacillary remedies; phosphorus as antinervine, quinine and ergot as vascular tonics, etc., have succeeded and failed when given internally. The list of external remedies employed and of surgical procedures advised is too long even to be simply enumerated; they have all had their successful action and have all failed. It is difficult to admit that a dermatosis so disconcerting is always to be referred to a single and unique cause.

Metallic Electrolysis and the Treatment of Sycosis and Alopecia Areata.—

Under the name of interstitial or metallic electrolysis Dr. Gautier, of Paris, has published a certain number of works which are found in part in the *Revue internationale d'électrothérapie* and in the first volume of the *Technique d'électrothérapie* (Paris, 1892; Maloine, editor). Among the applications of this method I should call attention to the curious attempts at treatment of sycosis and alopecia areata.

Theoretical Considerations.—Each time that an electric current passes through certain compound conductors, these are decomposed in their molecular construction and the molecules separate toward the two poles: at the positive pole, oxygen, iodine, chlorine, and acids appear; at the negative pole, hydrogen, potassium, sodium, and alkalis. It is thus that water, iodide of potassium, and chloride of sodium are decomposed into their two elements, and that there appear at the positive pole, oxygen, chlorine, and iodine. Now, the electrolytic effects of similar nature can be produced in the liquids of the tissues.

We can then utilize the electrolytic products of the two poles in two ways: in a therapeutic way, either by disengaging them entirely upon the tissues by the aid of unattackable electrodes (chemical galvanocaustic), or by absorbing them in great part, thanks to attackable electrodes (interstitial or metallic electrolysis). In the first case the positive pole will be in connection with the carbon electrode or one of platinum or even of gold; in the second it will be combined with such metals as copper, silver, zinc, iron, etc. The electrode, according to its nature, produces upon the tissues deep or superficial lesions. Thus with carbon we give rise to a deeper eschar than with platinum or gold—an eschar which suppurates and is eliminated. With the attackable electrodes, on the contrary, the traces are evanescent when they exist at all, and are of no consequence. But the use of these last-named electrodes offers above all the advantage of giving rise to new compounds, nascent medicaments possessed of powerful antiseptic properties (oxychloride of copper, for example), of rapid diffusion far from the operative field, and in no wise injurious.

Technical Details.—For the treatment of sycosis and alopecia areata Dr. Gautier uses needles of very pure red copper; after each application the needles are rubbed with very fine emery paper to keep them highly polished, and to free them from the coating of oxychloride. A battery of feeble continuous current furnished with a collector, a plaque covered with chamois skin, twelve by fifteen centimetres, complete the outfit. To connect the needles with the positive pole a metallic wire is used, which is very flexible, and of the diameter of sewing thread, thinly isolated. One extremity is fixed at the positive pole; the other is denuded, to permit of isolation of each needle successively. Antisepsis of the needles can be effected by means of an alcohol lamp. The sittings can be separated by weekly intervals, are of about a quarter hour's duration, and the intensity of current is of from eight to twenty milliampères, according to the number of needles employed. The adhesion of the needles in the tissues makes it obligatory to make a change in the direction of the current at the end of the *séance*, this reverse is made with one element of the battery and extends over four or five minutes. The needle is then withdrawn without effort, and the deposit of oxychloride of copper is augmented.

Sycosis.—Dr. Gautier has published the cure of two cases of sycosis of the lip by the preceding treatment. These cases had proved themselves very rebellious; one, which was cared for several months at the St. Louis, had been referred to him by Dr. Dubousquet; the other, treated by Dr. Calmettes and dating back several years, came to him directly. The needles of copper to the number of eight or ten were inserted at each *séance* along the course of the diseased hairs or in the center of the foci of suppuration. In these two cases two months sufficed to obtain a cure, which persists since 1892.

Dr. Boisseau du Rocher has employed for the same affection silver electrolysis instead of copper electrolysis. This author prefers the employment of silver needles, because of the feeble intensity of the current necessary to determine the production of the oxychloride of silver. In one case of most rebellious sycosis occupying the cheeks, the neck, the chin, both lips, and the nares, he employed the following operative procedure: "Ten to twelve needles of silver were implanted at different points, either successively or simultaneously, twice weekly, beginning in the month of May. Each needle remained in place for ten minutes on an average. This treatment was continued until

the end of July." At this epoch all trace of suppuration had disappeared, but the patient remained under observation for three weeks. At the end of August some new pustules appeared, when three or four additional applications were made, completing the cure, which has since persisted.

Alopecia Areata.—In a case of pelade in a small boy of ten years, who presented a plaque five centimetres in diameter on the crown of the head, Dr. Gautier obtained a cure in two sittings, fifteen days apart, without any other treatment. For alopecia, Dr. Gautier places the copper needles in a circle one centimetre apart, and at half a centimetre from the healthy parts, in the first sitting. In the next sitting he makes a new circle of concentric needles internal to the first. If the plaque is very extensive, he thinks another internal circle of needles may become necessary. He thinks that one may treat an entire sycosis or an entire alopecia, even if extensive, at a single sitting, if one has a sufficient number of needles to cover over the entire affected zone.

The prick is but slightly painful. After the application the tissues become quite red, and are the seat of an irritation which is at times quite intense, especially if the needles are inserted at a greater depth than half a centimetre. (It is evident that these researches, which are extremely interesting by the way, are as yet but experimental attempts in a direction which promises to be most fruitful. It is for this reason, and for this alone, that we have given them with some detail.)

Treatment of Furunculosis.—It is well known that there are rebellious cases of boils in which the analysis of the urine shows neither diabetes of any kind nor albuminuria. None of the internal remedies vaunted hitherto appear to act, and boils or carbuncles succeed each other for months with a tenacity which is truly discouraging. In chronic gouty subjects in whom this furunculosis seems to have replaced the clearly defined accidents of the gout itself, I have tried the use of colchicum. In a gouty subject of forty years, affected for months with furunculosis, the action of the extract of colchicum, given in doses of two or three centigrammes *per diem*, was in a way remarkable. From the sixth day the evolution of the furuncles already existing was arrested, and no new ones appeared. A little surprised at the result, the patient ceased using the colchicum, and at the end of a fortnight several boils showed themselves again. He then renewed the colchicum, and the affection was quickly subdued. These experiences were repeated several times, until the day when the subject, perfectly elated over the power of the colchicum, took it upon himself to continue the remedy for a long time, and then to cease its use gradually. He is at the present time completely cured of his furunculosis. As adjuvant and as local treatment, I prescribed besides daily lotions with camphorated alcohol over the whole body, and over the boils themselves employed Vidal's red plaster (minium, cinnabar, and diachylon). Since this first cure I have given colchicum to several other patients affected with furunculosis, but with varying success. I completely failed in some cases, especially when the furunculosis complicated eczematous eruptions. The colchicum seems, too, to have very little action upon the folliculites of sycosis vulgaris. I reserve the communication of the final results of my observations, with all the necessary details, for a time when I shall have collected sufficient data. For the moment I confine myself to the statement that in certain cases of rebellious furunculosis developing in patients without dia-

betes and without albuminuria, colchicum administered in sufficient doses has given good results.

Nature of the so-called Syphilitic Stricture of the Rectum.—Drs. Hartmann and Toupet have just caused to appear upon this much-discussed subject an interesting article in the *Semaine médicale*. They have arrived, from an ætiological point of view, at the following result: it is, that we find syphilis and tuberculosis very frequently in the history of this affection; but, on the other hand, there are those in whom we can find no trace of these two infections. From an anatomo-pathological standpoint we usually make out a considerable thickening of the submucous coat transformed into a fibrinous mass, with which the mucous membrane is confounded. This fibrinous mass invades in varying degree the muscular tunics, and even the whole thickness of the rectal wall. It is very rare to find the mucous membrane ulcerated; it is altered, and we find that it is covered with pavement epithelium stratified with irregular papillary bodies. At times there exists a veritable rectal pachydermia. Out of a large number of specimens we find only lesions showing diffuse inflammation of the mucous membrane and sclerous patches separated by diffuse embryonal bands. Again there are found in certain points well-marked tuberculous lesions, and at times lesions manifestly syphilitic, but they are not found in all patients who have specific antecedents. These strictures are really inflammatory when they develop, and the local syphilitic lesion, if there exists any at the onset, has only acted in opening the way to the infection, and in permitting a benign inflammatory process to develop in the rectum. It is thus seen that in nearly all the cases the stricture of the rectum is a stenosing rectitis, and that syphilis and tuberculosis, when they exist, which is not always a constant condition, only act by permitting infectious processes to penetrate the mucous and benign inflammation to produce the usual sclerous lesions.

L. BROcq.

PROSTATECTOMY.

Editor JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR: In your June number is an interesting paper on prostatectomy, by Dr. Eugene Fuller, in which paper occurs the following passage: "My method of enucleating the prostate through a small hole made in the base of the bladder is accomplished by a technique almost the opposite of that advocated by Nicoll, of Glasgow, in the *Lancet*, April 14, 1894, and by Alexander, of New York, independently of Nicoll, at the May (1894) meeting of the American Genito-Urinary Association. These gentlemen enucleate the prostate through a spacious perineal wound, that gland being brought into the reach of the perineal finger by the pressure exerted downward and forward by the finger or fingers of the other hand introduced into the bladder through a suprapubic incision. Then, after such enucleation, a dependent incision is made into the bladder and perineal drainage established."

I have been so unfortunate as not to have seen Dr. Alexander's paper. In regard to my operation, however (*Lancet*, April 14, 1894), will you permit me through your columns to point out that Dr. Fuller is in error (*vide* my paper

in the *Lancet*) when he says, "Then, after such enucleation, a dependent incision is made into the bladder and perineal drainage established." My operation is an enucleation of the prostate without interference in *any* way with the integrity of the bladder wall. Such an incision as Dr. Fuller apparently credits me with would do away with three of the advantages my method of prostatectomy possesses; viz., (1) The absence of a perineal tube, the patient being able to sit up in a few days; (2) the fact that no urine comes in contact with the large "raw" cavity from which the prostatic tissue has been removed; (3) the preservation in its entirety of the bladder neck.

Since the account of my operation was first published I have had made for me a pair of gouge cutting forceps and a pair of long curved scissors, by means of either of which, used in the perineal wound, controlled by the guiding touch of two fingers of the other hand in the bladder through the suprapubic wound, it is easy to remove just as much or as little of the prostate as may be desired—i. e., to remove the prostatic tissue close up to the mucous wall of the bladder, or to leave half an inch or more of it on the outside of the mucous coat.

Yours faithfully,

JAS. H. NICOLL.

GLASGOW, *June 19, 1895.*

Editor JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR: I have to beg Mr. Nicoll's pardon for unintentionally misquoting him with reference to perineal drainage in his prostatectomy operation. Apparently, then, Alexander's procedure differs from that of Nicoll only in that the former after the enucleation establishes perineal vesical drainage.

In any form of prostatectomy I am at present inclined to consider perineal vesical drainage of special value. The majority of these cases which do badly, do so because of defective vesical drainage. I do not think the perineal tube delays convalescence, nor do I think that urine in contact with the perineal wound is to be dreaded, since dependent and thorough drainage of that part can be attained. In these prostatic cases, however, and especially in the ones where the urine is foul, and in which there is no dependent drainage, the question of urine contact with the suprapubic wound is of importance and is to be dreaded. The suprapubic wound is more apt to delay convalescence in these cases than the perineal one. Consequently, my aim has been to strive for union by first intention as far as is possible with reference to the suprapubic wound, and success in this direction can be attained only by establishing dependent drainage. I have never been cognizant of a case where a simple incision through the bladder wall for dependent drainage has caused any real damage to the vesical neck.

Yours truly,

NEW YORK, *July 3, 1895.*

EUGENE FULLER.

Society Transactions.

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

NINTH ANNUAL MEETING, HELD AT THE CLIFTON HOUSE, NIAGARA FALLS,
ON MAY 28 AND 29, 1895.

FIRST DAY, TUESDAY, MAY 28TH.

DR. L. BOLTON BANGS, *President, in the Chair.*

(CONTINUED FROM PAGE 312.)

DR. LEWIS said the lines of infection in cases of cancer of the testes and of the penis are essentially different. In cancer of the testes the direction of infection is in the iliac glands, whereas if the penis is primarily involved and there is glandular infection it is always in the groin. If there is secondary involvement of the groin in cancer of the testicle, it is continuous in the skin. Several such cases have come under his observation. When the penis is removed for cancerous disease he considered it desirable to remove the testes also, because if they are left, the stump of the penis, rubbing against the clothing, is apt to produce a certain amount of erethism, which increases the blood supply to the parts and acts as a factor in the possible recurrence of the disease.

DR. WISHARD, in closing the discussion, stated that in the three cases he reported the inguinal glands were not at all involved, although Jacobson, in his late work on the subject, states that in the vast majority of cases—in perhaps nine out of ten—the extension is along the line of the inguinal glands. The speaker said he was in favor of removing the testes in these cases.

SECOND DAY, MAY 29TH.

A Tabulated Report of Twenty-seven Operations for Prostatesomyectomy by the Suprapubic Route; with Remarks.—DR. JOHN P. BRYSON, of St. Louis, read a paper on this subject, and in connection therewith he presented a table giving the details of each case. The suprapubic incision was made in each instance, the operation employed being that which has gradually evolved from the work of Garson and Peterson. The deliberate attack on prostatic overgrowth by this method practically began in 1888, although Dittel had operated once and Belfield twice previous to that year. This series was begun while the operation was in its infancy, and the technique far from complete. The rectal bag of Peterson was used in every case, and in only one instance was there any symptom of irritation to be attributed to it. The mortality for the entire series (twenty-seven cases) was a little more than twenty-five per cent, but this by no means represents the true death-rate for prostatesomyectomy. From the mortality list three cases should be excluded, one of which died from hæmorrhage from sarcomatous disease of the prostate, and the other two of pyelonephritis. Eliminating these three, we have twenty-four cases with four deaths, a mortality of 16·6 per cent. A radical cure was

obtained in thirteen of the cases, evidenced by the absence of residual urine, good rest at night, and a practical cure of the cystitis. Three cases developed tuberculous disease, two of which have succumbed to that malady, the third one being fairly well, with no residual urine. In two cases no benefit whatever appears to have resulted; these patients were aged, respectively, seventy-two and seventy-eight years, were far advanced in senile degeneration, and were operated on mainly in the hope of relieving the most distressing symptoms of "prostatism"—namely, frequent and painful urination and inability to get rest, either night or day. In nine cases the median-perineal incision was combined with the suprapubic for the purpose of assisting in removing submucous and intramural masses, or to secure proper drainage, or for both purposes. In the earlier operations an attempt was made to close the suprapubic wound with sutures, later on to abridge the incision by the same means with the hope of hastening the closure of the wound; these efforts were unsuccessful in every instance. In eight of the cases ether anæsthesia was employed, in eighteen chloroform, and in one the latter was combined with ether. In only one case was there any irritation of the kidneys which could be clearly attributed to the anæsthetic.

A Case of Complete Castration for Prostatic Overgrowth; Observation for Four Months.—By DR. JOHN P. BRYSON. The patient was a man, aged seventy-four years, who first showed evidence of beginning prostatism at the age of fifty-six, which slowly increased during the succeeding eleven years, until the tidal urine reached twelve ounces, while the residual urine was three ounces. There was dilatation of the bladder from obstructive prostatic overgrowth. He was compelled to get up three times at night to pass his urine. During the following six years the residual urine increased to six ounces, the tidal urine diminished to about two and a half ounces, and the diurnal and nocturnal frequency increased to eighteen and six, respectively, with marked diminution of detrusor energy. A cystitis and mild pyelonephritis developed. Two separate attempts to enter on catheter life failed on account of increased irritation, difficulty in entering the bladder, and an aggravation of the cystitis. Dilatation of the heart and pulmonary emphysema supervened. All the unfavorable symptoms increasing, complete castration was done four months ago. Demonstrable results followed the operation. There was marked and satisfactory diminution of the enlarged prostate, without any change in the frequency of urination, without alteration in the amount of tidal urine, and with but slight decrease in the amount of residual urine. The pyuria, bacteriuria, and pyelonephritis remain practically the same. In short, the double orchidectomy has caused an almost complete atrophy of the prostatic gland, without effecting any change in a chronically inflamed and degenerated bladder, and equally without curing or even benefiting a chronic pyelonephritis from extension.

The Results of Treatment of Hypertrophy of the Prostate.—DR. J. WILLIAM WHITE, of Philadelphia, read a paper on this subject, in which he gave the following conclusions:

1. The function of the testes, like that of the ovaries, is twofold—the reproduction of the species, and the development and preservation of the secondary sexual characteristics of the individual. The need for the exercise of the latter function ceases when full adult life is reached, but it is possible that the activity of the testes and ovaries in this respect does not disappear

coincidentally, and that hypertrophies in closely allied organs, like the prostate and the uterus, are the result of this misdirected energy. This hypothesis would increase the analogy between the fibro-myomata of the uterus and the adeno-fibromata of the prostate, which, from a clinical standpoint, is already very striking, and is further strengthened by the almost identical results of castration in the two conditions.

2. The theoretical objections that have been urged against the operation of double castration have been fully negatived by clinical experience, which shows that in a very large proportion of cases (thus far, approximately, 87·2 per cent) rapid atrophy of the prostatic enlargement follows the operation; a disappearance or great lessening in degree of long-standing cystitis (fifty-two per cent), more or less return of vesical contractility (sixty-six per cent), amelioration of the most troublesome symptoms (eighty-three per cent), and the return of local conditions not very far removed from normal (46·4 per cent) may be expected in a considerable number of cases.

3. The deaths have been twenty in one hundred and eleven cases—a percentage of eighteen; but of these, there seemed to be thirteen that may fairly be excluded in an attempt to ascertain the legitimate mortality in patients operated upon under surgically favorable conditions—i. e., before the actual onset of uræmia, or, better, before the kidney has become disorganized by the two factors rarely absent in advanced cases—backward pressure and inflammation. This, then, would leave a mortality of 7·1 per cent, which would probably be decreased as advancing knowledge permits of a better selection of cases. It is important to know that, even in the desperate cases which make up this series of deaths, fifteen (seventy-five per cent) showed improvement of symptoms or shrinkage of the prostate before they died.

4. A comparison with other operative procedures seems to justify the statement that, apart from the sentimental objections of aged persons on the one hand, and the real, entirely natural, and very strong repugnance to the operation felt by younger persons, castration offers a better prospect of permanent return of normal sexual conditions than does any other method of treatment. The relatively greater degree of improvement in successful cases should be considered, as well as the mortality, in comparing the operation with the various forms of prostatotomy and prostatectomy. So, too, should the absence of any risk of permanent fistulæ, perineal or suprapubic, and the ease and quickness with which the operation may be performed.

5. The evidence as to unilateral castration is at present contradictory, but there can be no doubt that in some cases it is followed by unilateral atrophy of the prostate, and in two cases at least this has resulted in a very marked improvement of symptoms. It is worthy of further investigation.

6. Experiments on dogs have shown in nearly every case in which the vas deferens was tied and divided on both sides that without much change in the testicles there was beginning atrophy and considerable loss of weight of the prostate. These experiments need repetition and confirmation, as the absence of corresponding testicular change seems to make the results somewhat anomalous. It is possible that the inclusion or severance of small but important nerves may account for the effect on the prostate.

7. Ligation of the vascular constituents of the cord or of the whole cord produces atrophy of the prostate, but in these experiments only after first causing disorganization of the testes.

Report of a Case of Early Obstruction of the Ejaculatory Ducts.*—By DR. E. C. BURNETT, of St. Louis.

DR. J. R. HAYDEN reported a case of double castration for prostatic hypertrophy, which was done about six months ago. The results were most favorable in every respect. Before the operation it was practically impossible to pass a catheter; there was a desire to urinate every five or ten minutes during the day, and the patient had to get up several times at night. At the present time he is passing his water voluntarily three or four times during the day, and gets up only once at night. He has not used the catheter for ten days. His cystitis has improved, and the amount of residual urine has been reduced from four ounces to one ounce. His general condition has greatly improved.

DR. ARTHUR T. CABOT, of Boston, said he is one of those who believe that the early good effects following double castration in prostatic hypertrophy are largely or partly due to the diminution of the blood supply in the prostate. The relief is too sudden to be entirely accounted for by the method which Dr. White suggested. One case has come under his observation which may have some bearing upon the possible secondary effects of the removal of the testicles. The patient was a man aged seventy-five years, a cabinet-maker. He had suffered for six years from obstructive symptoms, and an examination revealed a large, tender prostate and the presence of stone in the bladder. Litholapaxy and double castration were performed at one sitting. Before the operation the patient was in a rather shaky mental condition, and subsequent to it, he developed acute mania. He was examined by several alienists, all of whom expressed the opinion that his mental condition was not due to the removal of his testes. His mental symptoms failing to improve, it was decided to try the effect of injections of testiculin. The improvement produced by these injections was very marked. He at once became calmer, more reasonable, and fairly quiet. The injections were kept up for about a fortnight. At the end of that time they were discontinued because of the pain they gave rise to, but the improvement in his condition continued. It seemed as though the injections started him off in the right direction. Dr. Cabot said he did not know whether any conclusions could be drawn from this case. It, however, emphasized the importance of our knowing more about the possible secondary effects of the operation on the nervous system before we are willing to displace other operations by this modern one, which certainly has the great merit of being without danger.

DR. EDWARD MARTIN, of Philadelphia, said that Dr. Fuller's results with prostatectomy were certainly remarkable. He presumed that they were due not so much to the ingenious method of getting at the prostate as to the complete drainage obtained. As regards castration, the speaker said he had seen a number of Dr. White's cases, and could confirm his statements as to the good results obtained. In one case coming under his observation, in which he performed double castration for prostatic hypertrophy, there was a marked diminution in the frequency of urination, and since the operation the man has gained twenty pounds. His cystitis, however, persists, and he still has half an ounce of residual urine.

DR. BELL said he was surprised to hear the good results obtained by Drs. Fuller and Bryson with prostatectomy; his own results had not been so en-

* Will be published.

couraging. He had performed the operation five times by the suprapubic method, and of these two died; the patients were all old men and the disease was far advanced. In both instances death was apparently due to toxæmia, and at the autopsies nothing was found to account for it. In neither case was death due to hæmorrhage or shock, or apparently to anything incidental to the operation itself. The method of operation was practically identical with that described by Dr. Fuller, with enucleation and perineal drainage. As regards double castration, Dr. Bell said he was somewhat prejudiced against the operation. He disliked the idea of the mutilation which it involves, and found it difficult to believe that such rapid atrophy of the prostate follows its performance. We must make some allowance for the reports of cases by enthusiasts, who are not as scientific or skilled observers as is the originator of the operation. Moreover, the operation is fascinating to many because of its very simplicity.

DR. W. T. BELFIELD, of Chicago, said that Dr. Bryson's paper showed the improvement that can be brought about in the technique of prostatectomy by extended experience. His results were based on a larger number of cases than have been reported by any other single operator, and they gave us a fair idea of the position of prostatectomy to-day. Dr. Fuller's cases were even more remarkable, in that there was an entire absence of mortality. He did not quite understand how the operative technique pursued by Dr. Fuller differed from that heretofore employed by others, and was therefore unable to say whether that was an important factor in the brilliant results obtained. In some of his cases he had certainly removed very large prostatic masses, although probably no larger than those removed by Dr. White in the cases reported three or four years ago.

The objection to prostatectomy, as we all agree, is the mortality that follows it; the mortality is very apt to be due to suppuration and sepsis, and this occurs especially in these elderly men, because of the condition of the bladder and urine prevailing prior to the operation. The septic infection or intoxication is of course very apt to occur in the suprapubic tissues, although it may occur also in the prostatic wound itself. We endeavor to obviate this danger by repeated irrigation of the bladder. The speaker said he had endeavored to prevent sepsis after suprapubic cystotomy by continual immersion of the patient in a bath. This method was advocated by Hagadorn many years ago, and since then had been pursued by others. For use in private houses, Dr. Belfield said he has employed a portable rubber bath-tub. The difficulties of this method are obvious and sometimes serious, and to accomplish the same result, namely, permanent immersion of the bladder and the operative wound, the speaker said he had devised a small instrument, which he exhibited. It consists of a metal perineal tube, half an inch in caliber, with a suitable curve, and an eye near the inner extremity; the outer third of this is surrounded by a second tube connected with an irrigator. The tube is passed into the bladder through the perineal wound, and when in position a round rubber cushion or pessary is drawn over its outer end and kept snugly against the wound. The outer tube is then connected with an irrigator, and by this means there is continuous irrigation of the bladder and the wound without the annoyance of a continuous bath. In these cases he closes the suprapubic wound entirely, and usually obtains immediate union, even in old men whose bladders are degenerated.

As regards prostatic enlargement, Dr. Belfield said he was brought up to believe in a doctrine which still largely prevails, namely, that prostatic enlargement is analogous with uterine outgrowths, and is intimately associated with advanced age. The more experience he has with these cases, the more firmly does he feel convinced that the enlargement of the prostate, as we find it in old and middle-aged men, is the result of a chronic inflammatory process, and this belief he bases not only on microscopical examination, but also on the clinical aspects of the cases, and the results obtained by simply pressing out the contents of an enlarged prostate. Besides the reasons which are usually given to account for a chronic inflammatory condition of the prostate in an elderly man, there is another very common cause of irritation which he has never seen mentioned, namely, the constant occurrence of prostatic concretions in the second half of life. To what extent these concretions may be a factor in the production of enlargement of the prostate is a matter of speculation, and yet they must be taken into account. It is an interesting fact that in cases where prostatic follicles or structures resembling them are found in the bladder, somewhat removed from the prostate itself, tumor formation is very apt to occur, and that in these follicles we always find such prostatic concretions. An important thing is that the pathological condition in these cases is not limited to the prostate: we find it beginning in that gland, and soon spreading to the tubes which are so intimately connected with it, namely, the ejaculatory ducts, the vesiculæ seminales, and the utricule, which is sufficiently large to hold a considerable quantity of pus. These structures may properly be called the appendages of the prostate. In some of the lower animals, whose testicles are largely abdominal organs, the testicle, vas deferens, and an enormous utricule are all contained in a fibrous band corresponding with the broad ligament of the female. The same structure is also very distinct in the foetus of our own race, prior to the descent of the testes. In the male adult it consists of two fibrous and muscular layers behind the bladder, the so-called recto-vesical fascia, within which are contained the dilated extremity of the vas deferens, the seminal vesicles, and the utricule. We may well assist our phraseology by calling this structure the broad ligament of the male, corresponding to the broad ligament in the female, excepting that it is covered by peritonæum only on the posterior surface. Any chronic inflammation affecting the prostate spreads upward into this structure and into the accessory sexual organs. Assuming that double castration will cause atrophy of the prostatic follicles proper, will it cause an atrophy of the seminal vesicles, the dilated portion of the vas deferens, and the utricule? The speaker said he thought not. If we have a chronic inflammation of these accessory sexual tubes, can we expect that atrophy of the prostate alone will relieve the symptoms clinically? He thought not. Moreover, the chronically inflamed prostate may not atrophy after castration. The following case was related: The patient was a man, fifty-six years old, who for six years before entering the hospital suffered from the usual symptoms complained of by prostatitis. When he came under observation in February, 1895, he was urinating about ten or twelve times during the day and five or six times at night. The urine was passed in a very small stream and contained considerable pus. The act of micturition was painful. On the 25th of February both the man's testes were removed by a competent surgeon in Chicago. Upon examining them they were found to be perfect,

so far as could be made out. The patient remained in the hospital until March 28th, and during that time he improved somewhat, both subjectively and objectively. Urination was less painful and frequent, although not notably so. During his stay in the hospital his bladder was regularly washed out. Within one week after he left the hospital he was just as badly off as he was prior to the operation. Dr. Belfield said he first saw the patient on May 16th, eighty days after double castration had been performed. The man was urinating about ten or twelve times daily, and five or six times at night. His prostate was two and one eighth inches, measured vertically, and one and three quarters inches laterally. It was smooth and symmetrical, rather harder than normal, and entirely devoid of any signs which would lead one to suspect cancer or tuberculosis. The amount of his residual urine was two and three quarter ounces: what it had been previous to the operation he had not been able to ascertain. A cystoscopic examination showed nothing beyond the picture one would expect in a man who was for many years subject to chronic prostatitis. Further examination showed that the broad ligament was distinctly harder than it should be. Since that time he has been treated by means of pressure on these parts exerted through the rectum, and he is already able to hold his urine longer than he formerly could.

If the greater part of the symptoms in these elderly men be due to chronic inflammation extending up into these accessory channels, we should expect that by emptying the distended follicles, etc., by means of pressure, we might accomplish a good deal. Several have done what they term massage, which is probably the same process as that to which he has applied the name of milking the prostate and its appendages. The object of this treatment is to empty all those mucous sacs which are accessible from the rectum. The following case illustrates this method of treatment: The patient was a gentleman, now sixty-seven years of age, who had at various times been under the care of Guyon, Sir Henry Thompson, and Keyes. Last winter he came to Chicago in a very desperate condition; he was urinating every thirty or forty minutes entirely through a catheter and with great pain. He had a pyelonephritis; the prostate was decidedly enlarged, and the region above so much distended that Dr. Senn, who saw the case in consultation, thought there was a possibility of tuberculosis of the seminal vesicles. On account of the man's condition, it was deemed unwise to do any operative work, and, instead, this milking process was commenced. For the first week or ten days no apparent benefit followed, but about that time, after straining to urinate, there was a gush of pus with the urine. A rectal examination showed that this had come from the distended tubes above the prostate, and the man immediately began to improve. At present he is in better health than he has been in for six or eight years. Dr. Belfield said this method of treatment is certainly worthy of trial, and he desired to enter it in competition with double castration. So far as castration goes, it evidently fails in many instances, and he would be unwilling to perform it until he has had his finger in the prostatic urethra. He had seen three cases in which the operation was urged where stone was found in the bladder. The operation is done so easily that it is much more apt to be abused than is one which requires a greater degree of skill. The note of warning which he had recently uttered against the indiscriminate performance of the operation was provoked by the publication of a case where the facts plainly showed that it had been performed without due considera-

tion. Six years ago, Dr. Belfield said, he had, after vesical drainage, performed double castration on a dog, and the operation had no effect whatever upon the prostatic outgrowths existing in that case. He inquired of Dr. White whether any case has thus far been reported in which the operation was followed by a disappearance of actual intravesical prostatic outgrowths.

DR. CHISMORE said he was very glad to see that there is a more favorable outlook for operative measures on the prostate, and also to listen to the logical facts which have been accumulated by Dr. White regarding double castration, which will eventually bring out the proper value of that operation.

DR. E. E. KING, of Toronto, said he had performed double castration for prostatic hypertrophy in two instances, with a mortality of one hundred per cent. The fatal result, however, was not due to the operation in either case. The first patient was a man, aged seventy-four, who had suffered from prostatic symptoms for twelve years. The usual methods of treatment were employed without avail, and he was gradually getting worse. He was passing his urine ten or twelve times at night, and his general health was much impaired. There were six ounces of residual urine, and the catheter had to be inserted nine inches and a quarter. Double castration was done under chloroform, the operation occupying only a few minutes. On the second day he developed pneumonia, and died on the fifth day from that disease. The urine was drawn at eight inches and a quarter a few hours prior to his death. At the post-mortem the prostate was found to be reduced in size at least one half, according to Dr. King's measurements. The glandular and stromal elements showed distinct evidence of shrinking. The second case was that of a man, aged sixty-three years, who died on the thirteenth day. At the post-mortem a pyelo-nephrosis was found. In both of these cases there was a practical recovery from the operation itself.

DR. GLENN said that if a man has a chronic hypertrophy of the prostate, his testicles are of no value to him, and he saw no reason why double castration should not be performed. As regards the ætiology of prostatic hypertrophy, the speaker expressed the view that it is largely due to gonorrhœal infection in earlier life. Physiologically, the prostate gland ought to diminish with advancing age and a diminution of the sexual propensity. Dr. Glenn said he has performed double castration in one instance. The patient was a man, aged eighty-two, whose prostate was about as large as a good-sized lemon. The patient had an almost constant desire to urinate, the urine being voided in drops. There were three ounces of residual urine. His general health was greatly impaired. The operation was performed under ether, and the wound healed by first intention. The man died several days later from exhaustion.

DR. W. K. OTIS said he had been informed on very good authority that enlargement of the prostate does not exist in Japan. The disease is not known there.

DR. PALMER said the ætiology of the affection is not clear. It is said to be found most commonly among those who neglect to urinate when the desire comes on.

DR. BRYSON said that all the prostatic masses removed by him showed evidences of inflammatory change and glandular hypertrophy. The changes indicated that the prostate was more of a gland than a muscular organ. In his tabulated report of twenty-seven cases six successive and successful cases

are included. The mortality of prostatectomy must necessarily be high. The experience he has had with the operation has led him to favor a radical removal of the growths.

Dr. Bryson said that two cases of unilateral castration have come under his observation. One was a man, aged fifty-six, who, when he was twenty-four years old, had an attack of epididymo-orchitis, which resulted in complete atrophy of the left testis. In that case no difference in size could be discerned between the two sides of the prostate, and he was a very active man sexually. In the second case torsion of the cord occurred during an operation for varicocele, producing atrophy of one testis. Eleven months later there was no perceptible diminution in the size of the prostate on the corresponding side. When we take into consideration the number of blood-vessels in the prostate, and the soft and succulent character of the tissues, the question of its blood supply is a matter of very great moment in estimating its bulk. Regarding the age at which prostatic hypertrophy comes on, there is very little direct evidence to show that the organ grows to any considerable size before the age of fifty or fifty-five.

Dr. FULLER said the results of double castration, as given by Dr. White, are certainly very remarkable. In one instance, in which Dr. Keyes performed the operation, the patient died within a month. The operation seemed to excite a violent vesical tenesmus.

Dr. WHITE, in closing the discussion, said he could not accept the view that the rapid subsidence in the size of the prostate following double castration is due entirely or even chiefly to a diminution in the blood supply. In view of the accurate reports of cases made by Kirby and others, he felt convinced that a large proportion of the shrinkage is due to a genuine atrophy. Atrophy not only occurs, but is very rapid, beginning in the glandular and extending to the connective-tissue portion of the gland. As regards the occurrence of mania after the operation, in the two cases coming under his observation both recovered without the use of testiculin, and he suspected that the mania was of traumatic or uræmic origin. We must wait before we can estimate the remote effects of the operation. The method of drainage suggested by Dr. Belfield will very likely reduce the mortality after suprapubic work. The speaker said he did not agree with the statement made that the enlargement of the prostate is the result of a chronic inflammation; that theory, so far as he knew, has been rejected by all who have made a study of this subject. As regards the treatment of chronic prostatitis by massage, we must differentiate between inflammatory cases and true senile hypertrophy: it is not likely that massage will benefit the latter class of cases. Contrary to Dr. Belfield, he did not consider it necessary to put the finger into the prostatic urethra or bladder before undertaking double castration for the relief of these cases; one of its advantages is that the urinary tract is not opened. The clinical evidence in our possession justifies the statement that disappearance of actual prostatic outgrowths has resulted from the operation. The view expressed by Dr. Glenn, that the prostate should decrease rather than increase in size with advancing years, is probably supported by the facts, and in those patients who survive long enough there is a true atrophy of the prostate which begins as a result of senility.

THE PRESIDENT, Dr. BANGS, said he welcomed, as we all did, any addition to American surgery, and when a brilliant and distinguished member of the

American Genito-Urinary Association presented a new measure to the profession, it was necessary that no discredit should be brought upon it at the very outset. It was with this point in view that he published his recent letter protesting against the indiscriminate and unnecessary performance of double castration. In a number of instances coming under his observation in which the operation was performed it was entirely uncalled for.

(To be continued.)

Items.

Syphilitic Mucous Patches of the Conjunctiva. DR. ALBERT STAE LIN (*Monatshefte für pract. Dermatologie*, vol. xx, No. 1).

This paper forms part of a work on eye affections in syphilitics which the author is about to publish in conjunction with Dr. Wilbrand, a well-known oculist of Hamburg.

Staelin gives a detailed report of twenty-one cases of this secondary specific affection of the eye found in examining two hundred patients. These figures show that the common view that mucous patches of the conjunctiva are very rare is an erroneous one. In most of his cases specific papules were observed in other parts of the body. The papules of the conjunctiva do not differ in their aspects from those on other mucous membranes, only being smaller, their size varying from that of a pinhead to that of a pea. They have a semicircular shape, and if left alone, they show a tendency to ulcerate. Under specific treatment the nodule disappears entirely, only leaving a red basis, which in most cases likewise disappears. The most common site of the papule is the conjunctiva of the lower lid, and especially the *fornix conjunctivæ*. There being no conjunctival irritation and hardly any subjective symptoms, this affection, which the author found in over ten per cent of his cases, is very often overlooked.

Eczema and its Nature. PROF. BRED A, of Padua (*Archiv für Dermat. und Syph.*, 1894, vol. xxix, No. 2).

A well-written and interesting essay in which the author defines eczema as "a superficial, noncontagious, polymorphous, pruriginous, usually chronic dermatitis, which has a tendency to spread and to relapse, and which does not leave any scars."

He specifies, as not belonging to the class of eczema, erythema, eczema marginatum, staphylococcia (Wickham), Paget's disease, dysidrosis, mycosis fungoides (initial stage), tuberculosis cutanea, the different forms of neurodermatitis, keratoderma, eczematization of Brocq and Jacquet, eczema seborrhoicum (Unna), and dermatitis artificialis (caused by external irritations).

Ætiologically the author believes more or less in the "herpetismus and arthritismus" as factors, besides which a certain vulnerability of the skin and disturbances of the innervation play an important part.

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Original Communications.

ON CALCIFICATION OF THE TUNICA VAGINALIS AS A COMPLICATION OF OLD HYDROCELE.—ORCHIDOMENINGITIS CALCIFICANS.

By ROSWELL PARK, A. M., M. D.,

Professor of Surgery, Medical Department, University of Buffalo.

IN October of 1887 I was asked by Dr. Pryor, at that time physician to the Erie County Almshouse, to see with him Carl Brosske, aged sixty-three, an inmate of the insane department, whose insanity had assumed the form of melancholia. The man was, in fact, a monomaniac, the whole subject of his thought and worry being a tumor of or enlargement of one testicle, which on examination I found to be very large, firm and unyielding. I could only learn that the tumor had been at about its present size for six or eight years, and that it had existed in smaller shape for a much longer time. It was distinctly hard and nodular, and had he been younger I should have considered it of mixed cartilaginous character. As it was, I inclined rather to the view of malignancy or malignant degeneration of some previous lesion. From the patient himself I could gather nothing which was helpful in diagnosis. The tumor at that time was the size of a very large orange.

The patient was most anxious to have this removed, and not only eagerly sought operation but expressed himself unwilling to take an anæsthetic. At his urgent insistence, then, I operated without an anæsthetic, making the usual castration for such difficulties, and he scarcely gave a sign of pain during the operation. Before going on to speak of the specimen, it is worth while to say that after the operation there was a rapid and complete restoration to both mental and physical health.

On examination of the specimen I found it an ovoid mass about five inches in the longest diameter and four inches across. The walls were everywhere tough and gave one the sensation of an egg-shell. In fact, the whole tumor seemed of the consistence and size of a small ostrich egg. On section the sac wall was found to vary from one eighth to one quarter of an inch in thickness, and to be calcareous throughout. In some places the sensation under the finger and the brittleness of the membrane gave one exactly the feeling of an egg-shell parting under the fingers. Inside of the cavity there were some eight ounces of fluid, which had evidently been at one time pus. Whether the man had ever been tapped previously, or what the occasion for suppuration, I could not learn. The inner surface of the membrane was lined with the ordinary pyophylactic membrane, and was rough and irregular. On one side, in its proper place, were the remains of the testicle, whose walls were much thickened, but not calcareous. In this there were no evidences of destructive disease. The epididymis was also much thickened, especially in its surface, but otherwise did not seem materially diseased. At the lower end of the enlarged sac wall were found two cysts or encapsulated collections, containing cheesy material consisting mostly of cholesterin crystals and fat. This specimen, now eight years old, I show you here to-day. It is much less brittle now than when freshly removed, but the calcareous material scattered through its walls can still be easily recognized.

The condition is certainly an unusual one, having not only pathological interest, but bringing about a condition which might almost baffle exact diagnosis. It seems worth while, then, to present the specimen to you, and for a few moments to detain you with the consideration of its pathological characteristics.

It is of course well known that calcification may take place in any of the serous membranes—of which the tunica vaginalis is simply one. The minute chemistry of this process is undescribed, and the primary causes which produce the condition are as yet unrecognized. Acceptance of the fact, however, is very general. One sees such changes most often in the pericardium and pleura, but no serous membrane of the body appears absolutely exempt. That this is almost invariably a calcification and not an ossification needs to be positively stated. F. Cohn has given perhaps the best name for the condition according to the older views, since he called it "orchidomeningitis ossificans" (*Diss. Inaug.*, Halle, 1863, et Virch. *Arch.*, t. xxix, 3 et 4), although in the light of more accurate recognition of pathological processes it should be known probably as "orchidomeningitis calcificans." I have taken pains to look over a large number of writers, both on general

surgery and on this special branch of surgery, and have found but little which sheds light upon the condition. For the purpose of gathering together most of value that has been said, I would call your attention to the following quotations.

Sir Astley Cooper was one of the first writers to call attention to the condition, which he has done at some length in his *Observations on the Structure and Diseases of the Testis* (from the second London edition by Bransby Cooper, Philadelphia, 1845, page 90), under the heading, Ossific Inflammation of the Testicle. Some portions of this chapter are of particular interest here.

"The deposition of earthy matter is by no means an infrequent occurrence in other structures besides that of the osseous system, for it is not at all uncommon to find it in those permanent cartilages which supply the place of bone, as in the larynx and the cartilages of the ribs. It is also, but less frequently, found in the ligamentous tissues of the body, as in the ligaments of the symphysis pubis, the sacro-iliac symphysis, and in those of the spine; and even tendons have sometimes such depositions at the point of their insertions into the bone. . . . The serous membrane, as is frequently seen upon the pleura or the inner side of the ribs, has sometimes large patches of earth in it. The pericardium on the surface which is turned toward the heart also sometimes secretes bone, and the peritonæum on the surface of the spleen is often loaded with it too.

"In dissecting enlarged and excessively hardened testes, I have sometimes met with deposits of earth variously situated within the structures.

"The tunica vaginalis occasionally undergoes this change; and a portion of that membrane thus diseased was given me by Mr. Warner, surgeon of Guy's Hospital, forty years ago. He operated on a person who had long had a hydrocele. . . . He found his knife resisted by earthy matter in one part of the tunic, but he succeeded in removing it. I dried the portion which he removed, and found several deposits of earth in it. I showed it in an evening's lecture on surgery to Mr. Hunter, who, after examining it, laughingly said, 'I thank you, sir,' and put it in his pocket.

"A beautiful specimen of this disease in the tunica vaginalis may be seen in the museum at Guy's Hospital. The tunica albuginea, which is a tendinous structure, is more frequently affected with this complaint than the tunica vaginalis. Little patches of cartilage and of earth are often seen between the tunica vaginalis testis and the tunica albuginea. The greater part of the tunica albuginea is also sometimes entirely covered, as well as the interstitial space loaded, with earthy

matter, of which an excellent example may be seen in the collection of preparations at Guy's Hospital." *

On page 218 of this same work, under the caption of Ossification of the Tunica Vaginalis, are the following paragraphs:

"This state of the tunica vaginalis is but rare, and when it is found it is usually the concomitant of long-continued hydrocele; for I have seen only a single instance in which they did not exist concomitantly. The earthy matter is thrown out in patches of different sizes; but in the beautiful preparation of this disease in the collection of Guy's Hospital it has been deposited in numerous spiculæ, with which this membrane is in various parts studded.

"These various deposits show how much the effects of chronic inflammation may vary: under one action, serous effusion; under a second, great thickening; under a third, cartilaginous substance; and from a fourth, earthy concretions result. The tunica albuginea also undergoes a similar change of structure as regards the formation of cartilage and earth."

From Curling on *The Testis*: "In old hydroceles the sac is often a good deal thickened. The fibers of the cremaster become remarkably developed. Thickening and induration have been fully described by Gosselin (*Arch. gén. de méd.*, Fourth Series, vol. xxvii). He notices that the false membrane stops generally at the epididymis, and is not continued over the testicle.

"Percival Pott has remarked that fluctuation and transparency, two of the common signs, may be interfered with, or not met with, because of these changes in the sac.

"Gosselin's observations leave no doubt that hydrocele is likely to succeed inflammatory changes in the tunica vaginalis, and numerous observers have called attention to the frequency with which calcification succeeds hæmorrhage and changes in the coagulum."

* Sir Astley here goes on to describe certain specimens which he has figured in Plate XXIII of the above work; also in the concluding portion of chapter xv, entitled On the Formation of Cartilaginous Bodies in the Tunica Vaginalis—which, by the way, are occasionally found in hydrocele sacs and are completely loose or hanging from some portion of the membrane. These cartilaginous bodies are usually calcified in their interior and much resemble similar masses found loose within the joint cavities. Sir Astley states that he has been able to ascertain that their mode of formation is by two processes: First, they form pendulous bodies, hanging from a sac wall, covered by a reflected portion of the membrane. When the stalk becomes small they fall, or are broken off during various motions or by pressure. Of this kind he figures two or three specimens in his Plate XXIII. The second mode is by cystic formation on the surface of the testis between the tunica vaginalis and albuginea, which when opened is found to contain one of these little solid bodies hanging from its internal surface. He alludes also to the propensity of serous and serofibrous membranes, as already mentioned.

From Holmes's *System* (vol. iii, third edition, page 480, article by Humphrey and Jacobson):

"As a rule, but little alteration of the tunica vaginalis takes place for some time, the wall remaining thin and transparent in spite of repeatedappings. In the advanced stages, however, from the prolonged irritation, etc., and more especially after an injury or effusion of blood, the tunica vaginalis becomes opaque and thick. The subserous connective tissue is also thickened and condensed, being gradually converted into a kind of laminated fascia. In extreme cases of this hyperplastic thickening the tunica vaginalis may present to the unaided eye the appearance of cartilage, either over an extensive area or as localized projecting masses. Later on, as in other serous membranes—for example, the pericardium—calcification may take place in this densely sclerosed tissue. In addition to plates of this kind or flattened masses, others of a similar nature but different shape—e. g., warty, pedunculated, or polypoid—are often found. It is of no slight importance to remember the possible existence of these alterations in certain cases, as where great thickening or calcification is present the altered tunica vaginalis will be very evascular and but little inclined to respond with mild inflammatory exudation to the ordinary treatment. Thus, if iodine injection be used, there is a risk that it will be without result; while if stronger methods are used, it is to be feared that sloughing of the dense evascular tissue will follow, with destruction of the scrotum and other grave sequelæ."

(Virchow has compared these changes in the tunica vaginalis to the dense plates met with on the spleen in perisplenitis, *Krankhaften Geschwülste*, page 157.)

T. Holmes (*Treatise on Surgery*, fifth edition, Philadelphia, 1889, page 854) says: "But these hydroceles with a thick non-transparent sac are not easily distinguished from solid tumors of the testicle; on the contrary, they are sometimes almost indistinguishable from them. I once assisted a surgeon of great experience in an operation of a case which I had not seen before where he proposed to remove the testicle on account of supposed malignant disease, which, on incision, turned out to be a simple hydrocele; and I was once consulted in a similar case where, remembering this, I avoided the same error only by puncture with a trocar after the patient had been prepared for the operation."

From Drewitt (*Surgeons' Vade Mecum*, twelfth edition, Philadelphia, page 209):

"The author saw a large number of these cases at Madras under Dr. Paul. The tumors were mostly as large as cocoanuts, the tunica vaginalis exceedingly thick and rigid, and in some cases actually con-

verted into bone. The natives of India possess wonderful power of recovery after injury or disease, but their blood seems deficient in the stanching quality, so that bruises are apt to lead to very extravagant extravasation, and slow, persistent hæmorrhage is likely to occur in the sacs of the cyst, and in the cavities, including the tunica vaginalis. This is quoted from the *Madras Med. Times and Gaz.*, 1874, vol. i, page 486."

The above statement is made under the heading of Hæmatocele of the Tunica Vaginalis, the inference being that the conversion into bone was due to the original character of the clots thus produced.

From Monod et Terillon (*Traité des maladies du testicule*, Paris, 1889, p. 163):

"Ce tissu fibreux de formation nouvelle peut subir la dégénérescence calcaire, et donner naissance à ces véritables coques pierreuses qui enveloppent parfois le testicule. Ce cas est rare.

"Cohn a publié un fait, plus exceptionnel encore et probablement unique, d'ossification véritable de la vaginale, recueilli dans le service du Dr. Blasius.

"L'épaississement fibreux de la vaginale peut être bien plus localisé que nous ne venons de le dire. Il se montre alors sous forme de plaques fibreuses, ou quelquefois calcaires, développées dans l'épaisseur de la séreuse et faisant saillie à sa surface (Fig. 11). Cette altération se rencontre dans les vieilles hydrocèles, principalement chez les vieillards."

Van Buren and Keyes (New York, 1875, p. 405) report the case of an elderly man applying for treatment of hydrocele, where the fluid was withdrawn by exploratory puncture, and iodine injection practiced. After four days, serious symptoms set in, with excessive local reaction, general depression, etc. The tunica vaginalis was then completely incised. Upon introducing the finger through the wound, sharp edges and spiculæ of calcareous plates could be distinctly felt.

Internat. Encyc. (vol. vi, article by Bell, p. 567): "A man of fifty-one, under Professor Billroth's care, presented a tumor in the scrotum which had existed for ten years, and was the size of a fist and of almost bony hardness. The tunica vaginalis had to be laid open with bone pliers. All its inner surface was covered with layers of calcareous deposit. Most of these were removed, and the rest were thrown off by subsequent suppuration."

Agnew (vol. ii, p. 580) remarks that castration has in several cases been done under a misapprehension of the true nature of the malady, on account of thickening of tissues and solidity of contents making it difficult to elicit the ordinary signs relied on for recognition of

hydrocele and hæmatocele. He says also (p. 577): "The tunic is thickened with plastic transudation, is rough and fibrous, and often contains calcareous matter. It is not unlikely that this condition is elicited in the pleura after repeated attacks of inflammation."

Jacobson (*Diseases of the Male Organs of Generation*, 1893, p. 109): In extreme cases of this hyperplastic thickening (by chronic inflammation) the tunica vaginalis may present to the unaided eye the appearance of cartilage, either over an extensive area or as localized projecting masses. Later on, as in other serous membranes—for example, the pericardium—calcification may take place in this intensely sclerosed tissue. In addition to plates or flattened masses of this kind, others of a similar nature but different shape—for example, warty, pedunculated, or polypoid—may be present.*

In the *System of Genito-urinary Disease*, edited by Morrow, and in the article on Hydrocele and Spermatocoele, by Wyeth and Van Arsdale (vol. i, p. 946), is the following statement: "In chronic hydrocele the walls of the sac show the most important morbid changes, but they differ considerably in various conditions. In most cases the walls appear considerably thickened, and the more so, as a rule, the older the hydrocele is. The layers of the sac wall consist of sclerosed connective tissue, frequently indurated to the consistence of cartilage. Calcareous formations, and even localized osseous deposits, may here be found."

The above does not represent an exhaustive research through all literature, but the quotations have been culled from some fifty or sixty treatises which have been examined. They represent at least a summary of our present knowledge on the subject in its clinical aspect. There is little to be said save with regard to the matter of treatment. Inasmuch as it is made to appear that calcareous degeneration is not infrequently a sequel of hæmatocele of the scrotum, this furnishes another argument in favor of radical treatment of that condition. It makes it clearer also how errors in diagnosis may arise; and, finally, it furnishes the best possible argument in favor of exploration by incision in doubtful cases, since to treat cases in which the tunic is not permitted to collapse by means of the ordinary injections, as of iodine or of carbolic acid, is to invite failure, if not disaster. For such cases as these comprehended in the title of this paper, or for cases in which the condition is expected, the most radical possible treatment—namely,

* The specimens 41, 72, 241, and 76a, in the Museum of the Royal College of Surgeons, are examples of such change. In two of them the walls are almost completely calcified; in the others the change has taken the shape of scales, plates, etc.

that by complete excision of the sac wall—is not only the only scientific method, but gives promise of perfectly satisfactory results.

The following case is suggestive of the same difficulty in more or less marked degree, and is simply reported here as an illustration of the more common condition which may come under the eye of almost any operating surgeon: Patient twenty-eight years of age, with a large tumor distending the right half of the scrotum, its shape characteristic of hydrocele. Above this is a mass which is distinctly hernial, apparently omental. Operation December 12, 1894, at General Hospital. During the manipulation of the parts in cleansing them, the hernia became reduced, and there remained the hydrocele tumor about the size of an orange. On free incision of this the sac was found to be very much thickened, and to have a number of calcareous deposits in patches and plates, the largest of these being nearly the size of a silver dollar. This greatly thickened sac was dissected away from the other structures with considerable difficulty. The operation was finished without further incident, and the recovery uneventful.

REPORT OF A CASE OF EARLY OBSTRUCTION OF THE EJACULATORY DUCTS.

By E. C. BURNETT, M. D.

St. Louis.

JOHAN K., aged thirty-five, single, general health good. Was, at the age of five years, operated upon for stone in the bladder, the left lateral lithotomy operation being performed.

He came to me on June 17, 1894, to be treated for epididymitis of the left testis. The right testis had inflamed six months before, but, as was the case with the left testis at the time he visited me, the pain was not sufficient to cause him to quit work.

He had had an acute gonorrhœa several years ago that ran the usual course of this disease, gradually declining into what the patient called "the gleet." This of late years had bothered him only at intervals, appearing from time to time, especially after excess in venery, as a slight discharge.

The patient stated that his testicles almost always pained him for a day or so after sexual indulgence, though they had never inflamed before except in the one instance mentioned above. Sexually, he claimed that he was perfectly normal, except that he had never had an emission

of semen. He was made aware of this defect in his sexual organization first through the complaints of the women with whom he had cohabited, and had since verified their statements through the observation that there was never any secretion present in the urethra after coition.

Examination of the patient's external genitals proved them to be large and well developed and, with the exception of the left testis, perfectly normal, there being no trace observable of a former inflammation of the right testicle.

The left epididymis was swollen, tender to the touch, and painful when allowed to depend unsupported, though the pain was not sufficiently acute to keep him from work.

After a few days' suspension in a Horand-Langebert suspensory, this inflammation subsided, and the infiltration becoming resorbed a little later on, the testes regained a normal condition.

After the subsidence of the epididymitis, I introduced an endoscope into the urethra with the purpose of ascertaining the condition of the parts there. I found the prostatic portion of the canal extraordinarily short, for when I had arrived at the position where experience had taught me to lay the verumontanum, I found, upon withdrawing the obturator, that my instrument had entered the bladder. Besides this remarkable shortness of the prostatic urethra, I found the verumontanum existing only in miniature, being barely discernible from the surrounding tissue.

Every one that has used the endoscope much in the treatment of the deep urethra is familiar with the appearance of the verumontanum, both in its normal and pathological states, and he will bear me out in the assertion that even when it is not the subject of inflammatory overgrowth, it is plainly in evidence through the endoscope; and that when, as is true of the majority of cases of chronic gonorrhœa of the deep urethra, it has undergone inflammatory changes, its size increases so greatly that it sometimes becomes large enough to occlude the opening of a No. 28 F. endoscope, and prevent the passage of medium-sized instruments beyond it.

I attached no pathological import to these two unusual features when I first observed them, merely considering them as curious anomalies; and it was not until I had begun to investigate as to whether or not aspermatism existed that I found the cause of them. Palpation *per rectum* for the seminal vesicles disclosed the fact that they were not appreciable to the touch, and that the prostate was barely definable. With a sound in the bladder and the index finger in the rectum, I made out the prostate as perfect in shape, soft, but much smaller than that of a boy of ten or twelve years of age.

It was during one of these examinations that I noticed a scar upon the left side of the perinæum, and on inquiry as to its cause was informed of the lithotomy operation performed thirty years before. In this incident in the patient's early history lies the solution of the question as to the cause of the aspermatisms. Obviously in the performance of the operation for stone in the bladder the ejaculatory ducts were torn across, and they became permanently occluded; and through the occlusion of these ducts there followed arrest of development of the prostate gland and seminal vesicles.

Obstruction of the ejaculatory ducts is given as one of the causes of atrophy of the seminal vesicles, but I can find no reference to any such influence over the prostate.

The arrest of development of the prostate in the patient, undoubtedly the result of the occlusion of the ejaculatory ducts, throws, it seems to me, some light upon a point in connection with the physiology of this organ, leading to the inference that its principal function is a muscular one, and it is expressed in the action of accelerating the ejaculatory movements that take place at the time of the emission of the seminal fluid.

This inference has strong ground for its support in the facts that the prostate is largely a muscular organ, and that its growth is not perfected until it begins to functionate. It is developed separately from the ejaculatory ducts and the veru montanum, these latter being in no wise parts of the prostate proper.

Beginning at the time of sexual differentiation, the prostate is formed around the primary urethra, into which the ejaculatory ducts have already opened, and the conjoined ends of the remnants of the ducts of Mueller have already been incorporated as the sinus pocularis, and from the arrangement of its anatomical elements it seems as much like an exaggerated muscular addition to this part of the urethra as like a separate and distinct gland.

This muscular body is eminently fitted for the work of an accessory to the ejaculatory organs, and to judge by this case its functional relation to the genital organs goes not much further, for, though this man is practically without a prostate, he seems to be none the worse off sexually.

For the past ten years he has indulged in sexual intercourse frequently—averaging, he says, twice a week—and, with the exception of the emission of the seminal fluid, the act appears to be normal.

If the inference drawn from the condition of the prostate in this one case, its muscular formation, and the fact that its growth is not perfected until after it begins to functionate is correct—that the func-

tion of the prostate is simply that of an accessory to the ejaculatory organs—then it is easy to understand why atrophy should follow the destruction of its function through obliteration of the ejaculatory ducts, or through the complete loss of the testicles.

It would seem, from some facts gained in the study of a case of aspermatism due to the obliteration of the vasa epididymes, through a double epididymitis, that the resulting atrophy of the prostate after castration is not due directly to the loss of the testicles, but indirectly through the cessation of secretion, the presence of which in the seminal vesicles forms the necessary stimulus to the excitation of the ejaculatory movements.

I have a patient under my care at present in whom double epididymitis obliterated the vasa epididymes of both sides eighteen years ago, but who is troubled with nocturnal emissions of varying and annoying frequency. The prostate of this individual is normal in size and consistence. In such a case there is no interference with the function of the prostate, the secretion of the seminal vesicles furnishing the proper stimulus to the ejaculation.

Proof that atrophy of the hypertrophied prostate follows double castration is accumulating almost daily in the reports of cases thus operated upon since White suggested it as a means to the cure of "prostatiques," and such a result is just what we should expect from any other organ when thrown into a condition of disuse.

The rapidity with which improvement takes place in some of these cases can not, I think, be reasonably referred to the influence of the operation itself upon the pathological condition; for, as I have already stated, there is strong evidence in support of the conclusion that the presence or absence of the testicles has no direct influence over the prostate, and that the resulting atrophy, which occurs later, is the effect of the loss of its function through the cessation of the secretion in the vas deferens and seminal vesicles.

From the number of cases in my practice in which I have seen rapid improvement take place, under the conditions of quiet and the judicious handling of the case, without operation other than catheterization or the passage of a steel sound, I am disposed to attribute the early changes—that is, those occurring within the first few days—in those cases of double castration to the same conditions; except that the hypertrophied prostate takes on changes similar to those that bring about involution of the tissue of the gravid uterus so quickly after confinement, I can see no other explanation.

While fatty degeneration does attack the prostate, it is hardly probable that its progress is so rapid.

ECZEMA MARGINATUM AND ECZEMA SEBORRHOICUM.

By D. E. WETZEL, A. M., M. D.,

Denver, Colorado.

THE above-mentioned conditions are capable of pretty sharp distinction from simple eczema and eczema intertrigo due to rubbing parts of the body lying in contact with one another, with consequent maceration of the epidermis.

The designations employed in the title are quite badly mixed by different writers, many of the French authors using the name "eczema margine" to designate the disease described as "seborrhoic eczema" by those of the Vienna school and others. These ailments have clinical characters quite well understood, and the treatment is well agreed upon, but the nosologists and microscopists have not yet agreed upon a classification.

Eczema marginatum, as a general thing, is localized on the genitals and the immediate neighborhood, and forms plaques varying in size from that of a small coin to that of the palm of the hand, and at times much larger.

It seems to spread from the genitals upward upon the abdomen, outward upon the thighs and groin, downward upon the inner surface of the thighs, and thence backward upon the sacral region.

These patches may be found anywhere upon the body or limbs, in greater or less number. The borders of the patches appear ragged and covered with small papules, vesicles, or yellowish-brown crusts, while the parts within are pigmented dark brown, show scratch marks, or are covered with crusts.

The disease causes quite acute itching.

On account of the itching and the eruption of papules, Hebra considered the disease to be eczema, notwithstanding that the circular outlines suggested the trichophyton or some similar parasite.

Later, Koebner, Pick, and Kaposi observed a parasite similar to the trichophyton in the epidermic scales, and some authors have even believed the disease to be identical with ringworm of the scalp. It is noteworthy, however, that the disease causes intense itching, persists stubbornly even to fifteen or twenty years, and again resists treatment peculiarly. It does not appear to be very communicable, and the hairs in the diseased region do not break or lose their luster, in all of which respects it differs from *tinca tonsurans*. On account of these facts,

Pick and Kaposi agree upon the compromise of considering it as a combination of *tinea tonsurans* and *eczema*.

This opinion is supported by the causes of *eczema marginatum*. These are, first of all, maceration of the epidermis by the sweat, where parts of the body lie in contact, as the genito-crural fold, the fold of hanging breasts, etc. In these, *eczema intertrigo* first results, and, later, *eczema marginatum*. The next most usual cause is the maceration of the cuticle by means of water, especially as used in the practice of hydrotherapy, where plain *eczema* or *tinea*, or a combination of the two, may result. The diagnosis is not difficult, as the circinate outline and the *eczematous* characters seen in the vesicles and scratch signs are obvious.

The treatment is not an easy matter, as the causes of relapses are ever present, and the routing of the parasite is a difficult task. The parasite is situated quite deeply, and, to reach it, the superficial layer of the epidermis must be scraped away.

The therapy must take cognizance of these conditions, and, firstly, the remedies against *tinea* must be employed. Among these the best are chrysarobin ointment; Wilkinson's ointment; naphthol alcohol, one per cent; naphthol salve, five per cent; naphthol sulphur soap or paste, or paintings of alcoholic solutions of corrosive sublimate, one per cent; tar; tincture of iodine, etc. If the cure drags and much thickening of the epidermis exists, potassic hydrate, one to two, of water, dressings of potash soap, acetic-acid solutions, etc., can be employed, after which soothing applications should be used if much irritation is caused by the remedies.

Seborrhoeic *eczema* almost always occupies the thorax, at times both front and back, or the front only, and generally most fully developed in front, and ordinarily beginning there. In front the epigastric and presternal zones, and especially the region on the level with the nipples, is the seat of predilection. On the back, the region almost constantly occupied by it is directly opposed to that in front—that is, the interscapular space, at about the height of the angles of the scapulae. From these two regions, where the disease is almost certain to be located when present, it spreads more or less widely upon the neighboring parts, according as it is more or less developed or more or less chronic. Thus it may be observed covering a large portion of the breast, from one axilla to the other, and from the sternal notch to the epigastrium, and from one scapula to the other, and from the base of the neck to the region of the kidneys. Outside of these regions, it may also occupy the forehead, especially the part bordering on the hair. Here, however, the plaques are small and not so clearly

marked. It is especially upon the aspect presented by the lesions upon these parts that some observers base their opinion that the disease is a dry eczema from the beginning, distinct only in being cyclical in outline. Other authors consider the lesion to be parasitic, and to be caused by the same parasite which produces eczema marginatum, the lesion found upon the pubes and in the axillæ. They argue that the skin of the thighs is finer and smoother and constitutes a more favorable soil for the development of the microsporon—the parasite being the same, but less active. Others believe that the proof is not sufficient to sustain such generalization, but that erythrasma should be used for parasitic cases, and dry circinate eczema for the non-parasitic or where no mycelium is discovered with the microscope.

Notwithstanding the fact that the diagnosis of eczema seborrhoicum and eczema marginatum is precise and well determined, authors are far from being of accord in regard to their nature.

The French author Bazin for a long time called eczema seborrhoicum, pityriasis rubra circinata, or subacute pityriasis marginata. Hardy, who was inclined to call everything eczema, considered these conditions as being a simple variety of eczema which he called eczema marginatum.

Eczema seborrhoicum is a disease quite distinct from ordinary eczema, being neither homogeneous nor continuous, but composed of a more or less considerable number of plaques of various dimensions, either isolated or confluent. The plaques are of a yellowish rose color, or, on closer observation, of several shades. Thus the center may appear slightly depressed and pigmented brownish, with yellowish or greenish reflexes; then, nearer the edge of the lesion, rose or slightly yellowish, which color being in excess gives the characteristic color; finally, at the extreme edge, a line of dark or bright red, which separates the plaque from the healthy skin. The border may be marked with small red papules, isolated, but neighboring each other, forming a circular outline.

This disease extends by centrifugal growth or by coalescence of many neighboring plaques, whence arises great irregularity of the border—so-called geographical border.

Simple eczema prefers the articular and cutaneous folds, axillæ, neck, ears, etc. Eczema seborrhoicum is never found in those regions, but affects, on the contrary, the regions but seldom implicated by ordinary eczema. Simple eczema shows usually very poorly marked borders, but fades gradually, so that at times it is almost impossible to determine where the disease process ceases. In eczema seborrhoicum, on the contrary, the contours are clearly cut and definite.

Eczema has a knack of affecting several parts of the body at the same time or successively. It is an extensive, if not wandering, lesion. At any rate, it does not remain for weeks or months in the same condition. Eczema seborrhoicum, on the contrary, remains for months with the same general coloration and aspect. It is never weeping, has no mass of scales, and itches but slightly. Eczema seborrhoicum can be very quickly cured—for example, in fifteen or twenty days. The case is quite different with ordinary eczema. The treatment of seborrhoic eczema consists in the care of cleanliness. In fact, carelessness in this respect is one of the circumstances which favors its development. It is more frequent in persons who wear flannel underclothing, and especially who wear their flannels too long without change. When flannel undergarments are worn too long they hold the skin in contact with the sweat and accumulation of dirt and worn-out tissue—that is, in the very best condition for the development of vegetable organisms—an argument in favor of the parasitic origin of eczema seborrhoicum.

The physiognomy of eczema seborrhoicum is quite different from that of simple eczema, and, in fact, it is at times present on the same subject with simple eczema.

This latter fact leads Besnier to regard eczema seborrhoicum as a non-parasitic variety of ordinary eczema, reserving the name eczema marginatum for the parasitic lesions, agreeing in this respect with Kaposi. Besnier argues that mycelium or tubes have never been found in the scrapings of eczema seborrhoicum, and therefore it is not proper to judge it to be parasitic. Other observers claim to have discovered the presence of filaments of mycelium and spores quite analogous to those of trichophyton, but smaller. Fournier, however, and his followers judge the condition to be parasitic from the clinical make-up of the disease.

The treatment which succeeds best and almost certainly is the same as for ordinary parasitic skin diseases. It consists in ablutions of the parts with soapy mixtures, made carefully, twice daily; in sulphurous baths, applications of powders (bismuth, oxide of zinc, etc.); in frictions with black soap (potash soap), or friction with some slightly exciting ointment, as sulphur ointment.

This treatment, which so easily cures the eczema seborrhoicum, would almost certainly provoke a violent exacerbation of ordinary eczema.

REPORT OF A CASE IN WHICH THE HAIR TURNED FROM WHITE TO BLACK AFTER EXPOSURE TO SEVERE COLD.*

By GEORGE W. GRIFFITHS, M. D.,

Louisville, Ky.,

Chief Surgeon, Louisville and Nashville Railroad; Consulting Surgeon to the Louisville City Hospital; President, Louisville Clinical Society; Fellow of the Louisville Surgical Society, etc.

ON January 5, 1895, we had a tremendous fire in Louisville. The night was very cold, and the streets were covered with snow and ice. The gentleman I shall present as the subject of these remarks is an engineer in the Louisville Fire Department, aged sixty-five years, who was on duty from eleven o'clock on the night of January 5th until two o'clock the following day, except when he was taken away overcome by sheer exhaustion and sent by my friend Dr. Marshall in a carriage to his home, where he remained two or three hours, and again returned to duty. Two or three sections of hose were leaking near his engine, and the spray was blown by a strong north wind until he was covered from head to foot with ice, which became so thick that it had to be cut or broken off from his clothing. This man was constantly at his engine exposed to the north wind, which was carrying the spray of water from the broken hose. The top of his head was the warmest part of the body; his eyebrows and whiskers became wet and were frozen stiff. He had a red skull-cap over his head and his helmet on top of that; his head was not exposed at all, nor any hair, except the eyebrows and whiskers.

I saw him next day, when he had a very feeble pulse, and was much exhausted and worn out. He has not been in robust health for some time. The next afternoon after the exposure to the severe cold, as I have indicated, his hair turned black, and the wonder becomes greater when we consider that his hair was perfectly white before. He has been gray for eight years, and for the past three years perfectly white; before that he was a blond. Now his hair is black. I have known this gentleman for over forty years. The hair is oily, and does not seem to be dead at all. His head has been very carefully scrubbed several times, as I was inclined at first to think the change in color was caused by cinders or other foreign matter, but such did not prove to be the case.

* Read before the Louisville Surgical Society.

My friend Dr. Ewing Marshall has been kind enough to investigate the literature of the subject for me, and there are several cases where hair has suddenly turned from black to white, but he can find no recorded case where the hair has turned from white to black. I will quote extracts made by Dr. Marshall from the various works:

"It is a matter of history that the hair of Marie Antoinette and Sir Thomas More turned white on the eve of their respective executions.

"Campagne, quoted by Michelson, tells of a woman, thirty-six years of age, in whom the hair began to blanch on the twenty-third day of a severe fever, and six days later was perfectly white. On the seventh day, however, the color began to darken, and by the end of another week the hair had entirely recovered its original color.

"Van Harlingen reports this: An idiotic girl of thirteen, under observation in an asylum at Hamburg, suffered from epilepsy, with alternations of agitation and calmness, each of about a week's duration. The color of the hair underwent decided changes: sometimes it was blond and at other times red, while the depth of these colors varied.

"Thornton relates a case of sudden whitening of the hair under the influence of strong emotion.

"Falkenheim gives the case of a man of thirty-three whose hair was curiously variegated, being in irregular portions of the hair shaft colorless and pigmented. In cases hitherto reported by Wilson and others the ringed hairs were divided into pretty regular bands.

"Duhring says, in rare instances of canities or blanching, the color is to a moderate degree regained in summer."

In the case before us, as I have stated, the change in color of the hair took place, or was noticed, the day following the exposure. I was careful to tell you about the color of the cap, etc., thinking there might be some chemical action of cold upon worsted which would bring about such a change.

A CASE OF FAVUS IN A NEGRO.

By M. B. HUTCHINS, M. D.,

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THE notes of the following case should be of interest as presenting something which is unique. During my five and a half years' attention to dermatology in Atlanta I have seen only this case of favus. In New York, during 1888 and 1889, I saw only a few cases, all in foreigners of the Jew type, save one in an Irish boy.

I have never seen a case in an American, the disease being very rare among our native population. The following notes were made at my clinic at the Atlanta Medical College:

May 10, 1895, F. H. (colored), aged ten; female; favus capitis. The affection was first noticed three years ago as small yellow crusts about the vertex, the disease gradually spreading over the scalp by the formation of other crusts.

At present the entire hairy scalp is involved, with extension for about half an inch upon the forehead and neck, as well as in each pre-aural patch of hair, the latter showing the most perfect "cups." The whole scalp is covered, as with a cast, with yellowish-white crusts, smelling like a rat nest. The mass is about one fourth of an inch thick, and is composed of round, cuplike crusts from pinhead to dime in diameter. The hair is patchily thinned, having a chopped-out appearance. Upon removal of one of the "cups," the depression left oozes a serous fluid, scantily. There is no evidence of the disease upon the body, brows, or lids.

"Cups," mounted in glycerin, show, under the microscope, horny epithelium, masses of roundish, rather large spores, and here and there discrete, jointed, sausagelike gonidia chains.

The patient is of a dark ginger-cake color, dull-looking, with corneal opacities, and greatly enlarged anterior cervical lymphatic glands of the right side, as well as one enlarged one behind the right ear. She belongs to the so-called heavy scrofulous or strumous type. The mother and baby, with whom the patient sleeps, have no evidence of the favous disease.

The history given by the mother is very indefinite, but she says that the child had some white rats as pets when living in a small town in Georgia four or five years ago. It is probable that the disease remained unobserved from the white-rat period until some time afterward, the rats undoubtedly furnishing the contagium. The constitutional condition of the patient rendered the scalp fit soil, while the immunity of mother and baby and other members of the family adds an atom of proof to Kaposi's view as to the difficulty of contagion.

Acid salicylic, four drachms, and oleum lini, eight ounces, was ordered used, after plenty of soap and water for the removal of the mass of crusts. In order to disguise the linseed-oil odor, as directed, the dispensary clerk added an indefinite quantity of oil of cinnamon, the only thing he had, which probably accounts for the fact that for the next five weeks there was absolutely no clinical evidence of the favus.

At the end of that time, however, three perfect little "cups" were seen in each pre-aural patch of hair.

Meanwhile microscopical examination of hairs from the scalp showed branching mycelium at the borders of the root and fine spores in the root-sheaths. After the scalp was freed of crusts, it was found that there was no scarring, but the hair had that thinned appearance seen in some early syphilitics and sometimes spoken of as "rat-eaten."

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Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

TWO HUNDRED AND FORTY-SECOND REGULAR MEETING, HELD ON TUESDAY
EVENING, MARCH 26, 1895.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Traumatic Alopecia.—Presented by DR. GEORGE T. JACKSON. The patient was a male, aged twenty-four years, a musician. The disease began four years ago as an itching of the right eyebrow, for the relief of which the patient scratched, and soon the hair began to come out. When the patient came under observation five months ago the right eyebrow was completely bald; this condition, he said, had existed for two years. The skin was reddened, thickened, and scaly. Roots of hair showed through the thickened skin. The patient is of a nervous, excitable disposition. He was given a forty-per-cent tincture of the oil of cade, and under this treatment the redness and thickening have been somewhat reduced, and the itching is less severe. There are some hairs in the outer part of the eyebrow.

DR. GEORGE T. ELLIOT referred to a case coming under his observation in which the hair of the head and of both eyebrows was rubbed off on account of a pruritus, general in character. The patient was an inmate of the Skin and Cancer Hospital, and died of sarcoma of the mesenteric glands.

DR. E. B. BRONSON thought that in this case it was very likely that the loss of hair was due to mechanical causes. The circumscribed form of the eczema indicated a neurotic element in the case.

DR. J. A. FORDYCE said that he had seen several cases where thickening of the skin was secondary to a pruritus. In this case, probably, the itching was the primary condition, and the loss of hair and thickening of the skin were secondary.

DR. C. W. ALLEN suggested that the affected area be covered with medicated plaster or collodion, to prevent scratching.

DR. GEORGE H. FOX said when he saw the case some months ago there was a well-marked scaly eczema, and he attributed the loss of hair simply to the scratching. Now the eczema has disappeared, and the thickening of the skin and the localized character of the lesion inclined him to agree with Dr. Bronson that a neurotic element is present. He suggested the use of electricity to lessen the itching and reduce the irritation.

DR. C. W. CUTLER said he did not think the hair of the eyebrow would ever return, even if the itching is cured. The hair had been gone for so long a time that more or less atrophy of the hair bulbs was sure to have occurred.

DR. ELLIOT said that by passing the finger over the bald eyebrow one can feel the hair trying to grow.

DR. JACKSON said he believed there was a nervous element in the case, as the man was very excitable. During the last few weeks the hair seemed to be coming back at the outer portion of the eyebrow.

A Case of General Psoriasis and Molluscum Contagiosum.—Presented by DR. A. R. ROBINSON. The patient was a girl, aged nine years, suffering from general psoriasis and molluscum contagiosum. Dr. Robinson said there was nothing unusual in the case, excepting the combination of the two affections in the same patient.

DR. ALLEN said that at times he thought there was a connection between molluscum contagiosum and other skin diseases. He had observed it in combination with prurigo, generalized eczema, and in quite a number of cases of scabies. In patients with some skin diseases molluscum contagiosum seemed to be more apt to develop.

DR. FOX said that some years ago he called attention to the fact that in a number of cases of molluscum contagiosum coming under his observation, one third of them happened to have warts on the hands. Since then he had noticed the presence of warts in a number of cases of molluscum contagiosum. It is possible, he suggested, that there is some connection between these two affections.

DR. ROBINSON said that in the case presented we have in the same area two distinct diseases, both commencing in the same layer of skin and both hyperplastic in character, although the ultimate result of that hyperplastic process is different.

DR. FORDYCE said he did not think there was any relationship between the two affections, and that their occurrence in the same patient was simply accidental. The psoriasis will persist all her life, while the molluscum contagiosum will rapidly disappear under proper treatment.

DR. ELLIOT said he agreed with Dr. Fordyce. He did not think there was any connection between the psoriasis and the molluscum contagiosum.

A Case of Nævus of the Lip.—Presented by DR. FORDYCE. The patient was a child aged three years, with a cavernous tumor of the lower lip. When the child was first presented to the society in April, 1894, the nævus extended for some distance into the mucous membrane and was enlarging quite rapidly. Since that time it had been treated about half a dozen times by galvanopuncture, and had almost entirely disappeared. At each sitting the wire was inserted four or five times at a red heat. The sittings were at irregular intervals, sometimes six weeks or two months apart. No anæsthetic was employed.

A Case of Urticaria Pigmentosa.—Presented by DR. P. A. MORROW. The patient, a male, aged twenty-one years, was first presented to the society in October, 1876. The notes of the case, taken at that time, read as follows: 'Patient is a well-nourished, healthy-looking child, nearly two years of age. The eruption commenced when he was about six months old, after vaccination. It consists of pigmented spots varying in size from that of a pea to that of a ten-cent piece, papular or tubercular in character. The eruption is generally distributed, but most abundant around the neck, on the back, and

the flexures of joints. A few spots are seen on the palms of the hands and soles of the feet. They are of a pale yellowish color, changing when the child is excited to a reddish or bright scarlet hue. Elevations can be plainly felt by the fingers passed over the surface; when violently rubbed or scratched they become more raised, and the surface appears as if nettle-stung. The patient is the only one of nine children so affected." Dr. Morrow said that the child was under his observation from time to time for the next three or four years, during which period certain changes were observed in the character of the eruption. There was an increase in the number of pigmented spots, so that the entire surface, with the exception of a limited area over the root of the nose, the malar prominences, and a portion of the scalp, was profusely covered; the palms and soles were thickly studded. The color of the lesions deepened into a yellowish brown or greenish tint. An interesting feature was the development of crops of nodules, from the size of a coffee grain to that of an almond, more especially about the neck and back of the shoulders. These nodules were irregular in outline, moderately firm to the touch, with a pearly hue which gave a deceptive indication of contained fluid. Their duration was from one to three weeks, and their involution left a curiously checkered or wrinkled condition of the epidermis. The mucous membrane of the palate and fauces was also the seat of the eruption. The skin was subject to factitious urticaria, as it is now.

The above notes, Dr. Morrow said, will serve as a basis of comparison with the patient's present condition, which remains practically unchanged. It is rare that we have the opportunity to observe the continuance of an eruption for so many years.

DR. ELLIOT said he regarded it as the most remarkable case of urticaria pigmentosum he had ever seen.

DR. FORDYCE said it was very instructive to see a case of this kind after so many years have elapsed. The lesions, he thought, were not as pigmented as when the original notes were taken.

DR. ALLEN said he was surprised at the slight amount of pigmentation in a case of such long duration.

DR. FOX said he was at a loss to understand the nature of the pigmented spots in this case. In some of the worst cases of factitious urticaria he had seen the skin was perfectly white and smooth, and there was no tendency whatever to pigmentation.

DR. KLOTZ said it was remarkable that so little pigmentation existed in this case. In a case of urticaria pigmentosa recently reported by Jadassohn in a boy aged seventeen years, irritation of the pigmented spots which formed the remnants of the old lesions readily produced wheals, while other regions of the skin did not respond.

DR. MORROW said there was some evidence of improvement in this case from the fact that certain regions of the body had cleared up entirely. When the case was first seen the pigmented patches were especially numerous in the posterior region of the scalp, and they were attributed to the fact that he rested so much on the back of his head in lying down. On the lower extremities the lesions had cleared up almost entirely. The atrophied, wrinkled condition of the skin remained absolutely unchanged.

A Case of Circinate Dermatitis.—Presented by DR. FOX. The patient was a man with an eruption which was first noticed seven weeks ago. It appeared

suddenly, and is general in character. The eruption is scaly; some of the lesions are identical in character with those of pityriasis rosea, while others resemble a circinate psoriasis.

DR. CUTLER thought the affection was undoubtedly parasitic, both from the rapidity of the growth and the ringed appearance of the lesions; it was probably closely related to ringworm.

DR. SAMUEL ALEXANDER said he agreed with Dr. Cutler as to the parasitic nature of the disease.

DR. JACKSON said he did not think the lesions were of parasitic origin, because of the rapidity with which the entire body was involved. It appeared to him that the eruption belonged to the class of dermatitis seborrhoica.

DR. MORROW said at the first glance he was disposed to regard the case as one of eczema seborrhoicum, but a more careful examination of the lesions failed to confirm that diagnosis. The diagnosis, he thought, lay between pityriasis rosea, of unusually magnified proportions, and ringworm. In tropical countries the lesions of the latter disease tend to luxuriate and sometimes attain gigantic proportions, and the fact that this man is a cook by occupation, and is constantly exposed to a high temperature, may account for the rapidity of the growth of the lesions.

DR. ELLIOT said he would exclude seborrhœal eczema; there is no trace of that disease on the scalp. The diagnosis, he thought, rested between pityriasis maculata et circinata and generalized ringworm, and he was inclined in favor of the latter. He saw no resemblance to psoriasis. In circinate psoriasis the center of the lesions becomes normal in appearance, which is not so in this case. On account of the character of the scales, he did not regard it as a circinate eczema.

DR. ROBINSON said that, while he did not care to venture a diagnosis in the case, he did not agree with any of those already made. He did not regard the case as one of ringworm, nor seborrhœal eczema, nor pityriasis rosea.

DR. BRONSON said the case certainly bears the earmarks of an ordinary parasitic affection of the skin. The lesions are distinctly circinate in character, and appear to spread peripherally and heal at the center. The lesions have a more distinct margin than is seen in pityriasis rosea. Dr. Bronson said the main point he wished to make was that the affection was parasitic in character.

DR. FORDYCE said that, while the disease was evidently parasitic, he did not care to venture a diagnosis until he had an opportunity to examine the scales for the trichophyton. The lesions somewhat resembled those of psoriasis, or it might be an unusual form of seborrhœal eczema.

DR. ALLEN thought the case belonged to one of the rarer varieties of ringworm.

DR. KLOTZ thought the lesions developed rather rapidly for pityriasis rosea.

DR. FOX said it was possible that the case was one of herpes tonsurans maculosus. The lesions, however, were no more suggestive of a parasitic disease than those of ringed erythema multiforme would be; in fact, the lesions in this case, in their course and contour, are quite similar to those of erythema multiforme, excepting that these are scaly. The speaker said he did not regard the case as one of eczema or psoriasis, nor was it seborrhœal in character. Cases of this kind form a distinct group, which must be recognized; to

some of them Duhring has given the name *pityriasis maculata et circinata*. For the case shown to-night, circinate pityriasis would perhaps be a good name. The cases certainly merit a name which will separate them from both eczema and psoriasis.

A Case of Prurigo.—Presented by DR. FOX. The patient was a young man, aged twenty years, with a generalized prurigo. The disease commenced when he was two years old, and he has scratched more or less ever since, particularly in the summer.

DR. ALLEN pronounced the case a typical one of prurigo.

DR. BRONSON said that was his diagnosis when he saw the case some time ago.

DR. ELLIOT said the patient was under his observation several years ago.

DR. CUTLER said that he also had seen the patient at the New York Dispensary, and made a diagnosis of prurigo.

A Case of Unilateral Lentigo of the Face.—Presented by DR. BRONSON. The patient was a young girl who was also suffering from anterior poliomyelitis. The case was peculiar because of the distribution of the lentigo, the eruption being strictly confined to the left half of the face. According to the girl's statement, she has always had this eruption.

DR. FOX referred to a case coming under his observation in which one shoulder posteriorly was covered as far as the median line with what appeared to be ordinary freckles. These had only existed a few years.

DR. BRONSON, in reply to one of the speakers, who pronounced the case one of pigmented *nævus unilateralis*, said that it is certainly a pigmentary disease, whether we call it lentigo or *nævus*. At the last meeting of the American Dermatological Association he reported the case of a patient with pigmented spots of a lentiginous character, associated with certain nerve derangements, which somewhat resembled this case. There is no similarity between these cases and the ordinary *nævi*.

A Case of Syphilitic Onychia.—Presented by DR. CUTLER. The patient was a male, who contracted syphilis last June. The following September the nails on one hand and then on the other became affected, and afterward those on both feet. At present all the nails are affected. In reply to a question as to what the local treatment would be, Dr. Cutler said he proposed to trim off as much of the diseased nails as possible, and then apply mercurial plaster or ointment.

DR. ALLEN referred to a patient recently under his care who was in the third year of syphilis and had been free from all symptoms for a year, when erythematous rings appeared on the back and palms of his hands, like an erythema iris, and at the same time all the nails of both hands became tender, and a pink rim was noticeable running down for about an eighth of an inch under the nail.

DR. ALEXANDER said he had seen a case similar to the one described by Dr. Allen, without the erythema, however, which was cured by means of internal mercurial treatment. The nails were not lost.

DR. KLOTZ said that in Dr. Cutler's case the onychia appeared rather early in the course of the disease.

DR. CUTLER said that this was the first case he had seen of syphilitic nail disease of this character coming on so soon after the initial lesion.

DR. ELLIOT referred to a case of syphilis in which the nails were early affected. In that case improvement occurred very slowly.

DR. ALEXANDER said that in about five or six cases of syphilitic onychia, without paronychia, which he had seen and treated, he had never observed any benefit follow the use of local applications. They simply added to the discomfort of the patient without doing any good. The nails should be cut short and protected by gloves.

DR. E. L. KEYES said he did not treat these cases locally unless the lesions were inflammatory. Improvement usually occurred very slowly.

DR. ELLIOT said that local mercurial applications seemed to aggravate these lesions. He has obtained better results by applying plain oxide-of-zinc ointment and pushing the internal treatment.

DR. ALEXANDER said he had several times observed that in patients with onychia there was a marked absence of other local symptoms of syphilis.

DR. KLOTZ said he did not regard local treatment of much use in these cases. It was important, however, to protect the fingers from injury.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, HELD ON THURSDAY EVENING, MAY 16, 1895.

DR. JOSEPH D. BRYANT, *President, in the Chair.*

A Clinical and Bacteriological Study of the Gonococcus Neisser in the Male Urethra and in the Vulvo-vaginal Tract of Children. Illustrated by Lantern Slides and Cultures on Various Media, and other Diplococci obtained from the Genito-urinary Tracts.—By DR. HENRY HEIMAN.—The author stated that in his experiments he had employed the various media which have been hitherto recommended for cultivating the gonococcus, and, in addition, a new one—namely, chest-serum agar, which he has found very satisfactory. His examinations of the secretions taken from the normal urethra gave negative results in each instance, so far as the presence of gonococci was concerned. Such secretions contained short and long bacilli and various cocci and diplococci, none of which were decolorized by Gram's test. He repeated the experiments made by Turró on dogs, and obtained entirely different results. As regards the reaction of the urine in gonorrhœa, an examination made immediately after passing in sixteen cases showed that in fifteen cases the urine was acid and in the remaining case it was neutral. Urine agar he has found available for cultivation purposes, but not for transplantation. Placental blood-serum agar is also a very satisfactory culture medium, but he regarded the chest-serum agar as superior to all others, including peritoneal and beef serum, because it gives the most abundant growth of the gonococci. He obtained his supply of chest serum from patients suffering from acute pleurisy with effusion. For staining purposes he prefers a two-per-cent alcoholic solution of methylene violet.

The author stated that hitherto very little work has been done in the way of studying bacteriologically the normal vulvo-vaginal tract of children.

Out of twenty such cases examined by him he was not in a single instance able to demonstrate the presence of the gonococcus Neisser. Cover-glass preparations of the secretions obtained from the vulvo-vaginal tract in these cases showed short and long bacilli, spirilli, and pus cells containing diplococci; also small cocci and numerous other bacteria. The diplococci found in the pus cells, which bear some resemblance to the gonococci, have been called pseudo-gonococci; instead of this name he suggested that they be known as diplococci found in the vulvo-vaginal tract of children. Whether these diplococci are pathognomonic of any infectious process he was unable to say, although they were constantly found in cases of colpitis. They will not decolorize by Gram's method.

DR. HEIMAN then reviewed the literature of vulvo-vaginitis of children, or colpitis, which he stated must have been just as prevalent years ago as it is to-day, although little is said about it in the older works on the subject. The ætiology in these cases is often very obscure, while in others a direct history of infection can be obtained. In isolation we have a certain preventive for the spread of vulvo-vaginitis, and this phase of the subject merits more careful attention than is at present given to it. Among the more common carriers of the poison of the disease are towels, clothing, chambers, closets, instruments, etc. He suggested the following classification of the disease: 1. Catarrhal vulvo-vaginitis, due (a) to uncleanness, foreign bodies, or traumatism; (b) to infection (non-gonorrhœal). 2. Gonorrhœal vulvo-vaginitis, due either to a pure or mixed infection.

Inoculation Experiments.—The crucial test for the gonococci, Dr. Heiman said, is their inoculation in the human subject; yet for obvious reasons this method has been but seldom employed. His own work in this direction has been confined to the following cases:

CASE I.—A boy aged four years, suffering from idiocy and chronic epilepsy. An examination of the secretions obtained from the urethra previous to inoculation gave negative results. The urethra was then inoculated with pure cultures of gonococci. On the fifth day a drop of pus was noticed at the meatus. Cover-glass preparations showed pus cells with typical gonococci, which were decolorized by Gram's method. The subsequent course of the disease was a mild one. On the twelfth day a very appreciable amount of pus could be expressed from the meatus; this was found to contain gonococci in abundance.

CASE II.—The subject upon whom this experiment was performed was a boy suffering from idiocy. After taking the same precautions to ascertain the condition of his urethra prior to inoculation he was inoculated with supposed gonococci obtained from a case of vulvo-vaginitis in a child. On the second day pus appeared, and on the fourth day the penis became swollen, and the discharge was profuse. Cover-glass preparations showed typical gonococci.

CASE III.—This subject was a man in the last stages of pulmonary tuberculosis. He stated that he had never had any venereal disease, and no traces of any such could be found. His urethra was inoculated with a pure culture of gonococci taken from a case of vulvo-vaginitis. Four days later a slight discharge was noticed. Cover-glass preparations showed characteristic gonococci decolorized by Gram's method. On the ninth day the examination was repeated with the same result. The patient died on the fourteenth day

after inoculation, and Dr. Van Gieson made a post-mortem examination of the genito-urinary tract.

CASE IV.—In this case a subject was inoculated with the diplococcus found in catarrhal colpititis, with negative results.

The author gave the following as his conclusions:

1. That the gonococcus Neisser is never present in the normal urethra.
2. The diplococcus found in the normal urethra can positively be differentiated from the gonococcus Neisser by Gram's stain.
3. The diplococcus described by Turró is not the gonococcus.
4. He indorsed Wertheim's conclusions, excepting that he believes liquid sterile chest serum is preferable to placental blood serum as a culture medium.
5. Gram's stain is the crucial test for the gonococci, and should be employed in all cases.
6. For ordinary staining purposes a two-per-cent alcoholic solution of methylene violet will answer the purpose.
7. The normal vulvo-vaginal tract is never the habitat of the gonococcus Neisser.
8. The diplococcus found in catarrhal cases of colpititis will not decolorize by Gram's method.
9. The gonococcus Neisser is found in cases of gonorrhœal vulvo-vaginitis.
10. The inoculation experiments made tend to confirm his belief in the specific power of the gonococcus.

DR. S. LUSTGARTEN said he had listened to Dr. Heiman's paper with much interest, and complimented him on his painstaking work. In his own researches on this subject, published in 1887, he mentioned the fact that in the normal urethra a diplococcus is found which closely resembles the gonococcus both in size and appearance, and which can not always be differentiated from it by Gram's method of staining. He still holds this view, and even Steinscheider, a pupil of Neisser's, has admitted that in five per cent of cases there is a possibility of error. The practical consequences of this fact are not so great, because if we find in the secretions anything which can be taken for the gonococcus the case is regarded as one of gonorrhœa and treated as such. Of late the opinion has been again brought forward that the male urethra may give rise to contagion even if gonococci are not found, owing to the fact that the latter have undergone involution. This view is held by certain German authorities. From our present knowledge of the subject we are not always in a position to give a positive opinion from the microscopic test, and he hoped, with the aid of Dr. Heiman's chest serum, that culture tests would be rendered less difficult.

DR. IRA VAN GIESON said he was glad to have an opportunity to praise Dr. Heiman's paper, which embodies an immense amount of work. Furthermore, it is of great practical value, for it is only by researches such as these that we can determine whether the gonococci are present or absent in the later stages of gonorrhœa. The discovery of the gonococcus has been of practically no value in the therapeutics of acute gonorrhœa in the male, and the old-time treatment of the disease is still the best. One very important feature of the paper is the stress which was laid upon the value of Gram's method in identifying the gonococcus. With this opinion Dr. Van Gieson said he is in thorough accord. As to the persistence of the gonococcus for months or even years after the inception of the disease, that is a question

which we are still unable to settle positively. It would be rather remarkable to have it persist for so long a period in the urethra, and in this respect it would differ from any other bacteria with which we are acquainted. At the autopsy performed on the third patient referred to in Dr. Heiman's paper, the anterior urethral mucous membrane looked red, perhaps slightly more so than usual. The prostatic portion of the urethra was of a velvety hue and covered with a slight yellow film. The microscope showed comparatively few changes in the anterior urethra, but posteriorly it was severely damaged. The epithelium was abraded in many places, and underneath there was a small round-cell infiltration and an extravasation of red blood-cells.

DR. HEIMAN, in closing the discussion, said he was aware of the fact that Steinscheider has reported that in five per cent of cases examined he found a diplococcus which became decolorized by Gram's method. He thought this was partly due to the various ways in which this method is employed by different men.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

New Observations on Dermatitis Herpetiformis.—For some time past they have taken up again in France the study of dermatitis herpetiformis of Dühring upon new lines, and already some results have been obtained upon which it seems worth while dwelling, in order to call forth control experiments.

I should point out first the very interesting report upon an autopsy made by Dr. Gaston in a case of dermatitis herpetiformis where he had made out the presence of a Pott's disease, which had entirely escaped observation during the patient's life, as well as most distinct renal lesions, diffuse and implicating both the connective tissue and the parenchyma. The connective tissue was very much thickened in spots, and at these points there existed glomerular as well as tubular atrophy. The most constant lesion, however, was the swelling of the epithelium of the convoluted tubes; the granular infiltration with obstruction of the lumen of the canals. In a word, they were the lesions of a mixed nephritis. In a second autopsy, made in collaboration with Dr. Leredde, the same author found in the cervical region an intimate adhesion of the spinal meninges on the anterior surface of the vertebræ, and renal lesions of undoubted nature. He dwells upon these two cases and upon the observation already made by other authors of a marked hypoazoturia in certain instances of dermatitis herpetiformis to insist that henceforth a minute examination of the viscera should be instituted in this disease, so that we can arrive at a conclusion regarding its dependence upon renal changes, insufficient elimination, or lesions of the nervous system. He points out further in his work another interesting fact, which is that bacteriological examination of the eruptive elements in dermatitis herpetiformis does not seem to furnish any indications. Out of five cases which were studied in this particular, he obtained two sterile results, one culture of a

diplococcus of undetermined nature, one of a white staphylococcus, and one green culture (?).

The researches of Drs. Leredde and Perrin upon dermatitis herpetiformis have also an importance. These authors begin by establishing the fact that no one has ever pointed out cutaneous lesions in which diapedesis of Ehrlich's eosinophilic cells was the dominant feature. (These premises are unfortunately contested by some histologists.)

Now, when we examine histologically the skin of a patient with herpes gestationis we are struck by the accumulation of these eosin-imbibing cells at the periphery of perivascular embryonic masses, and by their infiltration into the whole derma at a distance from the vessels. If we examine, on the other hand, the contents of a vesicle of herpes gestationis, we find that it is almost exclusively composed of eosinophilic cells (exactly 214 cells with eosinophilic granulations to 227 white globules). We find exactly the same lesions when we make a histological examination of a typical dermatitis herpetiformis not connected with pregnancy, so that pathological anatomy furnishes an additional argument in favor of the identity of dermatitis herpetiformis and herpes gestationis. Indeed, the dominant morbid change seems to consist in all these cases in the presence of cells having a special micro-chemical action starting from the vessels of the derma and then being eliminated by the epiderm, and by alteration of the blood, showing from twelve to twenty-two eosinophilic cells to a hundred leucocytes. Furthermore, the intensity of the dermic lesions, which has been determined by Dr. Leredde, was quite variable according to the case. The diapedesis is at times intense, at times feeble. It tends especially to form groups principally perivascular, but we find also at a distance migratory cells in variable number. These migratory cells are especially the lymphocytes and the eosinophiles; but the latter have a marked tendency to wander far away from the vessels. There are observed also polynuclear elements resembling those of acute inflammation when bullæ or vesicles have arrived at a period of maturation or suppuration without doubt following a common microbial infection which invades the skin. The fixed connective-tissue cells participate equally for their part in the formation of cellular foci.

According to Drs. Leredde and Perrin, œdema is the second essential element of the dermic changes. There is vaso-motor paralysis of the derma; its vessels dilate; the blood or lymphatic serum is imbibed by the connective tissue, modifies the form of the papillæ, hypertrophies them, or causes them to disappear.

The bullæ seem to be caused by the issue of serum in large quantity at the union of the epidermis with the derma and by the precipitation of the fibrin. Hypertrophy of the epiderm is a frequent occurrence, but, in general, it remains moderate. Karyokinesis is frequent and in proportion to this hypertrophy. Eosinophilic cells are also seen between the cells of the mucous bodies, which further indicates the importance which the elements possess in this affection and the tendency which the skin shows toward their elimination in all possible ways. It is not the less true that this diffuse elimination of these elements by the epidermis is an accessory fact, for there are but a small number which can be thus eliminated. The vesicles are, on the contrary, along with the bullæ, the modes of evacuation of great importance. They form between the cells of the Malpighian bodies by accumulation of

lymphatic elements, perhaps all eosinophiles originally, then they enlarge by the addition of blood serum and new leucocytes. It therefore seems that, thanks to these interesting researches, we now know an important anatomical alteration in dermatitis herpetiformis—the elimination by the skin of eosinophilic cells in excess in the blood.

New Treatment of Alopecia Areata.—DR. SABOURAUD, whose excellent works on the tinea are well known, has just published a new procedure in the treatment of alopecia areata, from which the following clinical and anatomo-pathological considerations are taken:

1. Alopecia areata is essentially a recurrent affection; it recurs in about one half the cases. 2. It is not a disease of the hairs, but a tegumentary affection.

Now, in lesions of this class, if we wish to act upon the derma, it is proved that we must first of all destroy the horny layer of the epiderm, which otherwise constitutes a varnish of almost complete impermeability. Starting with this principle, the author begins by applying upon the diseased patch a layer of the vesicating fluid of Bidet, and the following day, after having removed the blister, he applies upon the denuded chorium a fifteen-per-cent solution of nitrate of silver, with or without previous cocaine anæsthesia. If necessary, he renews these applications at the end of ten or fifteen days. He thinks he can thus arrest the evolution of an alopecia at its onset, and that the results obtained are much better than those following other procedures. He recalls further that it was the regretted E. Vidal who advised the employment of fluid vesicatories in alopecia as giving relatively rapid cures.

[In this connection I would announce to readers of the JOURNAL that, since my last letter, we have experimented on quite an extensive scale with Dr. Gautier himself at my polyclinic of La Rochefoucauld, with the procedure advised by him for this affection, cupric electrolysis, concerning which treatment I gave quite extended details. After numerous trials we have come to believe that the method does not give appreciable results which permit of its being advocated. The passage of the current and the decomposition of tissue are painful; there remain small wounds which leave deep cicatrices, depressed at the points where the needles have been applied. The hairs do not seem to grow in any noteworthy manner about the points of operation, and the onward march of the disease has not been arrested in sufficient cases for one to conclude as to the real efficacy of this treatment. It is thus, it seems to us, still another procedure to place to one side. We intend to try electricity in another form. I have thought it well to announce to the readers of the preceding letter the failure of these trials, so as to save them from similar failures.

Modifications to enter into the General Treatment of Syphilis.—In spite of the multitude of communications and the works already written upon this subject, the treatment of syphilis seems to be a topic of discussion always in order. Dr. Abadie, a well-known Parisian oculist, has also made a contribution to the question from a somewhat new point of view. He has been impressed by the enormous quantity of ocular manifestations of a grave nature due to syphilis for which he is being continually consulted—parenchymatous keratitis, optic neuritis, chorioido-retinitis, etc., which develop especially in patients who carried out at the beginning of their treatment either an insufficient course or none at all. Now, these manifestations of a severe nature which he is called upon to care for never give way to the treatment which in

France they are habituated to look upon as classic—the administration of pills of protiodide and the iodide of potassium. To succeed in causing them to disappear, one must employ either mercurial frictions or more particularly subcutaneous injections of mercurial salts. It is certain that subcutaneous injections of mercurial salts surely cure grave manifestations which come on late and which have resisted all other modes of treatment. Dr. Abadie asks why this treatment, which is really efficacious, has not been instituted at an earlier period, or at the time of infection, as soon as syphilis has been diagnosed, as soon as the chancre has appeared, so as to attempt to combat and prevent general infection of the organism at the very moment when infection has taken place. He therefore proposes that instead of clinging to the older methods—which according to him have probably no real efficacy, since the secondary manifestations disappear spontaneously even when no medication at all is employed—he proposes, I say, to make use of mercurial compounds for injection from the very *début*, and he especially favors intravenous injections after the method of Bacelli.

To make these injections Dr. Abadie uses a syringe entirely of glass, so as to avoid the introduction of any foreign substances into the vessels. A ligature is applied at the middle portion of the arm in such a way as to cause turgescence of the veins at the bend of the elbow and of the forearm; then, with a hollow needle made of iridiated platinum passed through the flame of an alcohol lamp, the vein is gently perforated. As soon as the hollow needle is found to be in the cavity of the vein, a sensation of freedom is transmitted to the hand which indicates that the point is in the canal. The ligature is now removed and the injection is gently forced out. No swelling is occasioned in the neighboring parts, which is an evident proof that the fluid has been injected into a vessel. The needle is quickly withdrawn and the orifice on the surface is compressed by the finger, followed by an antiseptic occlusive dressing fastened down with collodion. It is naturally understood that the region has been washed with sublimate before this little operation is done. Dr. Abadie injects in this manner every two or three days the contents of a Pravaz syringe of a one-per cent solution of cyanide or bichloride of mercury. He has already made from four hundred to five hundred such injections, and has never had the least accident follow. The patients bear them very well, go off at once to their occupations, and have no severe pains such as are at times provoked by subcutaneous injections. Furthermore, it seems that from the results already obtained they are incontestably more efficacious than the latter. These injections, then, constitute the most efficacious means known at the present time of triumphing over syphilitic accidents of a rebellious nature. They do not appear to give rise to mercurial salivation. [The large dose recommended should make one cautious.—*Translator*.]

Interstitial Keratitis in Acquired Syphilis.—DR. TROUSSEAU has quite recently again taken up this much discussed and till now badly studied subject in an interesting work. He remarks that, after having been for a long time denied, the existence of interstitial keratitis in acquired syphilis has of late been admitted by nearly all recent writers. It is more frequent in women than in men. It is almost always unilateral, the opposite of what is observed in the hereditary form of syphilitic interstitial keratitis, which is nearly always bilateral. It is possible that it is less likely to recur than the hereditary interstitial keratitis. It appears ordinarily between the end of the first year

after infection and the beginning of the third year. The onset is insidious, the cornea becomes opaque very slowly, and the reactionary phenomena are only moderate during the period of development. The cornea may scarcely become vascularized at the time, and the return to transparency is quite rapidly accomplished. The iris is always implicated, and choroiditis quite frequently coexists. The last phenomenon to persist after the return of transparency in the cornea is hyalitis. Mercurial treatment acts very well upon the corneal lesion, of which the regression can be followed, so to speak, day by day under its influence. Dr. Trousseau has seen all the cases of interstitial keratitis due to acquired syphilis, which he has had to care for, get cured within a period of time varying from five weeks to three months.

Treatment of Gonorrhœal Rheumatism by Turpentine Baths.—DR. BALZER has employed for the past year in his service at the Midi Hospital for blennorrhagic rheumatism hot turpentine baths, associated with other local measures, and with general treatment. He thinks them much more active than sulphur baths. He has adopted for their preparation the formula of Howard Pinkney, which is as follows:

Emulsion of black soap..... 200 grammes.

Essence of turpentine..... 100 grammes.

(Shake the mixture at the moment of preparing the bath.)

For a general bath he prescribes from two hundred to five hundred grammes of this mixture, according to the case. He increases the quantity only very slowly and in watching the susceptibility of the patient's skin. For local baths of the upper extremity or of the lower extremity, doses relatively greater may be employed. The author also insists upon the necessity that exists for giving the baths very hot. The local baths have a temperature varying from 40° to 45°; the general baths do not pass beyond 40°. The patient feels from the moment he is placed in the bath a burning sensation, more or less pronounced, with a tingling over the whole surface of the skin. The intensity of these sensations is very variable, according to the individual, and it is for this that one can not give a uniform formula for these baths. The duration of the bath is ordinarily from ten to fifteen minutes, the skin of the patient, when he comes out, is red and hot, and he feels for an hour afterward sensations of heat and burning.

Dr. Balzer has treated by this method twenty-six patients affected with blennorrhagic rheumatism as soon as the acute phenomena and fever have disappeared. He believes that all the patients have been benefited by this medication. He has seen in particular one case of rheumatism of the wrist with considerable swelling of the sheaths of the tendons rapidly give way under it; also one case of rheumatism of the instep which was very rebellious and had resisted other modes of treatment, several cases of rheumatism of the knee, and of polyarticular rheumatism. He has several times seen articulations restored after one or two baths only.

However, he recognizes the fact that these marvelous effects are not constant, and that there are cases, on the contrary, which are only ameliorated after a long time.

BROCQ.

PARIS, June 30, 1895.

Book Reviews.

Die Geschichte der venerischen Krankheiten. By J. K. PROKSCH. Bonn: P. Hansten, 1895. Pp. 424.

The author of this exhaustive historical study is already well and favorably known by his books on the bibliography of venereal diseases. The book now before us shows that he is not only acquainted with the titles of books upon venereal diseases, but also with their contents. In characteristic German style, he begins his history with the dawn of the world's records. He does not seem to have a very high idea of the records of syphilis as written on prehistoric skulls and cross-bones. He finds traces of venereal diseases in the myths of India, Babylon, Assyria, Greece, and Scythia. He quotes for us from the historical records of China, Japan, India, Persia, Egypt, Israel, Greece, Rome, Arabia, and all the modern nations. The moral of the book is that as far back as history has been written men have paid for their illegitimate sexual pleasures by acquiring venereal disease.

The book is a most valuable contribution to our knowledge of the subject of which it treats and indispensable to all who in the future would study the history of venereal disease.

G. T. J.

Die Zaraath (Lepra) der hebräischen Bibel. By G. N. MÜNCH, O. O. Professor der Universität zu Kiew. Hamburg u. Leipzig: L. Voss, 1893. Pp. 167.

This monograph is one of that series of Dermatological Studies issued by Voss. It deals in a very thoroughgoing fashion with the very much discussed question of the identity of the leprosy of the Bible with that which is now known as leprosy. It is a study based on the sources, and we find nearly all writers quoted who have dealt with this question both in ancient and modern times. We are told that the first author who wrote about leprosy is Celsus, and that he described it under the name of elephantiasis. In the "Books of Hippocrates" there is no trace of a disease such as is now understood as leprosy. In them is described a disease called lepra, but it does not correspond with our leprosy.

After discussing what the old Greeks knew about leprosy, he passes on to the Bible. All the passages in the Bible bearing upon the subject are quoted and studied. Our author concludes that what is described as zaraath of the skin is nothing but our vitiligo. The zaraath of the head and face has many points of resemblance to ringworm. The affliction of Job, that has been regarded by some as leprosy, is thought by Münch to have been a chronic eczema. He concludes that there is no evidence in the Bible that the ancient Jews knew anything about what we now call leprosy.

For those interested in the question this will prove itself to be an interesting book. It is furnished with two photographs of cases of anæsthetic leprosy.

G. T. J.

Traitement de la Blennorrhagie par les Lavages au Siphon. ÉMILE DELAROCHE. Société d'Éditions Scientifiques, Paris, 1893.

This monograph is the author's inaugural thesis. The investigations were carried on in the service and in the laboratory of M. Balzer, who has been for some time engaged in the work. The process of washing the urethra, conducted in all stages of gonorrhœa, was performed by means of an apparatus consisting of an elevated reservoir containing solutions of permanganate of potassium or nitrate of silver in varying strength, which was siphoned out by a tube ending in a short canula, the latter having a diameter proportionate to the pressure desired. In lavage of the anterior urethra, the siphon bottle was placed at a height of fifty to seventy centimetres; in posterior, a metre to a metre and a half were required. The height necessary, however, varied markedly in different individuals. The number of the author's observations were fifty-two, and from them he draws the following conclusions:

1. Lavage of the urethra fulfills all the indications of antiseptic treatment. The treatment comprises one washing per day with a litre of a mild antiseptic solution, by the aid of a siphon elevated from a metre to a metre and a half. The lavage may be employed at any period of the disease. Applied to the treatment of the acute phase, it causes rapid disappearance of the pain and inflammatory phenomena. Repeated daily, it is an efficacious and rapid means of destroying the gonococci at once in all the portions of the urethra which they occupy. Lavage without a catheter is preferable to the use of hard or soft instruments.

2. Solutions of permanganate of potassium (1-4,000 to 1-1,000) are well borne by urethra and bladder. These solutions are strong enough to destroy rapidly the gonococci; they never produce lesions of the mucous membrane. Gonococci, after their disappearance, do not reappear in the discharge if treatment is continued. From the first washings the purulent discharge becomes serous; it diminishes rapidly and is soon reduced to a slight dripping. A cure can be made in any period by permanganate alone.

3. Nitrate of silver, employed in solutions of 1-4,000 or 1-3,000, is well borne by urethra and bladder; solutions of 1-2,000 are quite often well borne; at 1-1,000 lavage is painful. Lavage with nitrate of silver less often soothes the inflammatory phenomena at the beginning of a gonorrhœa. The destructive action on the gonococcus is often rapid, but sometimes inconstant, gonococci reappearing in the discharge after an absence of several days and a rigorous treatment. Nitrate of silver provokes a purulent discharge often more abundant than that due to the urethritis; after several washings it disappears. It is possible to cure gonorrhœa by means of lavage with nitrate of silver alone.

4. Preference is given to permanganate solutions over those of nitrate of silver. A complete bibliography concludes the monograph. J. C. J.

A Clinical Manual. ANDREW MACFARLANE. New York: G. P. Putnam's Sons, 1894.

A claim for originality is not made for the methods of investigation contained in this volume; it is confessedly compiled largely from other authors whose work constitutes much of the best in the field of clinical research. The secondary title explains the character of the work, which is certainly not con-

veyed to the mind by the principal. It is a "guide to the practical examination of the excretions, secretions, and the blood," covering the urine, stomach contents, fæces, blood, pathological fluids, and pathogenic micro-organisms. All the well-known methods are found clearly put forth, with many doubtless less familiar. The use of spectroscope, hæmacytometer, stains in all the divisions of research, are explained fully. Under the head of urine the author considers its "accident-constituents," such as mercury, chlorate of potash, chrysarobin, balsam of copaiba, and their methods of detection. Hydronephrosis finds a place under pathological fluids; the gonococcus, amœba coli, and tubercle bacillus under micro-organisms. It would seem, in view of what is claimed for the Gram stain, that it should at least be mentioned in connection with the gonococcus. Illustrations are numerous, and fair in quality. The four colored plates placed at the end of the volume are not brilliantly successful, those illustrating blood conditions being particularly poor. Except as a condensation and collection of previously well-known methods (not complete even in that) we see no excuse for the book's existence. J. C. J.

Transactions of the American Dermatological Association. Eighteenth Annual Meeting. CHARLES WARRENNE ALLEN, *Secretary.*

This is the best of the compilations of the association's proceedings in appearance, completeness, and excellence of illustration that has appeared to the present time. The number of pages has been increased, the statistical tables are made to embrace all reports from July, 1877, to January, 1893, the notes on the discussion of each paper are fuller. As to the individual contributions, they are doubtless familiar to the reader, having appeared with but three exceptions in this JOURNAL. Allen's Acquired Idiosyncrasy for Quinine was published in the *Medical Record*. Fox's Rare Forms of Alopecia and Zeisler's Impetigo Herpetiformis, so far as we know, have not appeared in print previously. As we remember it, the last was merely an introduction to the discussion. The illustrations are the same as those in the original publications. The association, no less than its painstaking secretary, deserves a word of congratulation on the form in which its labors are to be preserved. J. C. J.

L'Urétrite chez la Femme (Urethritis in Women; Its Form, Varieties, and Microbiology). GASTON RICHARD D'AULNAY. Société d'Éditions Scientifiques, Paris, 1893.

The work in this thesis seems to be conscientious and painstaking. The author has had access to the great Paris hospitals for his material, and since his conclusions do not altogether coincide with commonly accepted teachings it appears worth while to give a brief *résumé* of them.

I. The female urethra, although short, by virtue of its conformation (follicular glands) offers an almost impregnable asylum to micro-organisms which form the base of infection and contagion in its inflammations.

II. Every urethritis is microbic in origin, and, according to its origin, is infectious, contagious, or both. The type of the contagion is, of course, gonorrhœal; of the infectious, "primitively pyogenic urethritis" (due generally to staphylococci) is one form. A second the author calls "mixed urethritis *d'emblée*," in which numerous pyogenic microbes are found by the side of

gonococci. So-called non-microbic urethritides, he thinks, are merely old affections in which the organisms have disappeared into the depths of the glandular *culs-de-sac*.

III. The discharge may vary markedly in each variety. It is, however, never greenish in the pyogenic form. In mixed urethritis it follows the usual course in gonorrhœa. Urethritis in women is usually painless, except occasionally when very acute. Micturition is normal on account of the very rare extension to the bladder. The neighborhood of the canal may be invaded.

IV. Complications are local, located in adjacent parts or widely distributed over the body. They differ little from those seen in urethritis in the male—fistulæ, abscesses, stricture, vegetations; folliculitides, inflammation of the whole sexual apparatus; pericarditis, arthritis, erythematous dermatitis, and neuritis.

V. The different microbic varieties of the disease may act on the mucous membrane singly or in combination. Urethritis of *external* origin are those already mentioned, due to germs, the infection carried by coitus, catheters, or foreign bodies. They are venereal or traumatic. Urethritis of *internal* origin is diathetic or medicamentous, due to a hyperæmic fluxion.

VI. At the beginning of the disease the purulent discharge acts upon the membrane, diminishing the vitality of its constituent cells, and causing, by loss of its layers, solutions of continuity. When the micro-organisms have thus an open road they penetrate the subjacent connective tissue, causing inflammation and fibrous-tissue formation (stricture), or the constant irritation produces hypertrophy of the mucous papillæ (proliferating urethritis). When the intra-urethral glands are invaded, miliary abscesses are formed (saccular or glandular urethritis), opening in various directions and producing fistulæ.

VII. In order to give a prognosis and intelligently to direct treatment, the nature and stage of the discharge must be recognized, and this is done by the microscope (with Gram stain) or by culture methods. Pathogenic microbes other than gonococci, can not now be regarded as the agents of a morbid entity.

VIII. Internal treatment has absolutely no value. Local treatment comprises continuous urethral irrigation with a litre of warm antiseptic solution two or three times a day. Preference is given to permanganate (1-2,000) in gonorrhœa, bichloride of mercury (1-1,000) in pyogenic, and in mixed urethritis a mixture of the two. In the intervals, medicated bougies are used. An excellent chapter on prophylaxis and a long bibliography add to the value of the thesis.

J. C. J.

Selections.

Strangulation of the Testis and Epididymis from Torsion of the Spermatic Cord.—DR. JOHN VAN DER POEL (*Med. Record*, June 15, 1895).

The writer stated that until within the past few years the subject of strangulation of the testis from torsion of the spermatic cord had received but little attention. Nicoladoni was the first to report and describe a case of this nature,

and although undoubted examples had previously been seen, the cause of the trouble had not been understood. The author said that, so far as he is aware, twenty-two cases in all have thus far been reported, and of these he gave a brief review. His own case was that of a physician, twenty-five years of age, which differed from the other cases reported in that the torsion was reducible by the patient himself, and that it frequently recurred, on several occasions coming on as often as twice within twenty-four hours. When he first came under Dr. Van der Poel's observation the trouble had existed for about three years. He had been told by his father, also a physician, that at birth his right testis had but partially descended, and did not reach the upper part of the scrotum until two or three years later. There had never been any hernia. He stated that at irregular intervals, sometimes at night, when asleep, but more frequently during the day when up and about, without apparent cause, without strain or sudden movement, he would be seized with an acute pain in the right testicle, radiating upward along the cord and inguinal canal, and that on feeling where the pain was he would find the testis, epididymis, and cord swollen and extremely sensitive, the cord feeling hard and knotty to the touch. At the time of the first attack, not understanding the cause of the trouble or the method of relief, he suffered for about two hours with intense pain, and finally, on lying down and elevating the penis, the pain and swelling both subsided. This time he seemed to think his trouble was caused by wearing his trousers pulled up too snugly on the right side. After this the attacks varied from twice within twenty-four hours to but once in four months, and at no time was he able to associate or connect any special movement or exertion with its coming on. From the subsequent attacks he obtained relief by pulling or stroking the cord upward, or lifting up the testicle, evidently allowing it to untwist. After the attacks he was never confined to bed, but would immediately be up and about.

On examination the right testis was found to be about the same size as the left; the usual difference as regards the situation of the two was exaggerated, the left being well down to the bottom of the scrotum, while the right hugged the upper wall, and seemed drawn upward toward the inguinal canal. On attempting to rotate it, three complete half turns in either direction could be made without causing the slightest inconvenience or pain; but if held in this position for a minute or longer, the veins of the cord became swollen and hard, showing an evident obstruction to the return circulation. Beyond this point it was possible to twist still more, about one fourth of a circle, when the manipulation became painful. When left to itself it would *remain* in this position. The left testis admitted of a rotation of a little over one complete circle, but when left to itself it would *return* to its normal position. Five months ago, in this patient, an incomplete, reducible inguinal hernia developed upon the right side, which is easily retained by a truss.

As regards the causes of torsion of the cord, the speaker said they are both predisposing and active. Of the twenty-two cases thus far reported, all excepting two occurred either in young men or boys, the ages ranging from four to twenty-five years; most of them occurred about the age of puberty. One condition or predisposing factor, it seems, is absolutely necessary—i. e., the absence of fixation of the testicle by means of the peritoneal reflex, the mesorchium, so that it hangs freely on a pedicle, which, at any rate, is not fixed for some distance. The origin of this abnormal condition—which shows

itself either as a too slender, or too long, or as a complete absence of fixation—is to be traced back to early disturbances in the development of the vaginal process and the shortening of the gubernaculum, which takes place at the same time. The majority of the cases have been associated with incomplete descent. The flattened shape of the testis has also been referred to as a predisposing factor. As regards direct causes, these have been of a various nature: one came on after a strain, one after sneezing, one after blowing on a cornet, one after straining at stool, one after bowling at cricket; yet there are a number which came on without apparent cause, the condition even appearing during sleep.

As regards the pathology of this affection, in all cases where the vaginal process was opened there was found a greater or less quantity of bloody serum and clots. The testis and epididymis were congested and swollen, of a dark or bluish-black color, and sometimes in a more or less advanced stage of necrosis.

In most cases there have been more or less well-developed symptoms of inflammation, such as pain, local swelling, and in some instances œdema, redness, and fever; when we find these conditions associated with constipation and vomiting, together with absence of impulse in an irreducible swelling, developing suddenly after perhaps some strain or exertion, we are naturally led to suspect a strangulated hernia. There are, however, some distinctions between the two. With torsion of the cord the constipation may not be absolute. The vomiting, which is not apt to become stercoraceous, is not so persistent. The shock is less, and there is not so much abdominal distention or pain at the umbilicus. In fact, these latter may not be present at all. The tumor is apt to be harder and more solid to the touch; and if the seat of the torsion is below the ring, the swelling would not extend into the canal. Still, a correct diagnosis may be difficult or even impossible without an exploratory incision.

As regards treatment: If left alone, the condition will probably result in either atrophy or gangrene. In all cases where castration has been performed there has been a good recovery. In eight cases the testis was not removed. Two of these were untwisted without operation, followed by atrophy in one. In three the testis sloughed away during healing. In two there was subsequent atrophy. In one, five months after operation, there was no change, excepting that it was harder than normal and fixed by adhesions at the root of the penis.

The Function of the Sweat Glands in Man. P. G. UNNA (*Brit. Journ. of Derm.*, vol. vi, No. 9, 1894).

Unna takes up the cudgel in behalf of the views recently attacked by Beatty, and attributed to him, in which, however, he disclaims any priority or originality. In support of the theory that a part of the function of the coil glands is the secretion of fat, the author cites authorities beginning with Krause and Simon, fifty years and more ago. Kölliker (1853) found fat *only* in the sweat glands of the axillæ in normal conditions; under pathological, he and Müller demonstrated fat in these glands in a case of ichthyosis hystrix. Meissner (1857), Henle (1861), and Ludwig (1861) all recognize fat production, the first named claiming it as the only function of sweat glands. Grünhagen,

in 1885, mentions Schottin's observation of cholesterin in sweat of the palm. The histologists Ranvier and Bonnet add their quota to the testimony in support of the theory.

The author declares that his views have changed since 1881 from the radical opinion of Meissner to that of Henle; that, while all sweat glands contain and secrete fat at times, at others their epithelium undergoes a change, becoming flatter and clearer, and then secreting an alkaline fluid, very poor in specific elements. Their function, therefore, is a double one. Unna has examined sections from thirty-seven cases, with failure to find fat in varying quantity only in ten per cent—a small proportion, considering the possibility of its having been washed out by watery secretion. In seborrhœic eczema he discovered fat in forty-eight cases out of fifty-three. He replies to the negative result of Beatty's experiments with the sweat of the palm and fingers by showing with osmic-acid blackening of prints on clear slides and paper, after all trace of oil has been removed from the hand. Beatty, Unna claims, did not pursue his osmic-acid treatment long enough, for only after twenty-four hours does complete staining take place in sections and prints on slides.

In the course of his experiments Unna discovered that the blackening took place after various lengths of time with different fats, being a much shorter interval with the secretion of sebaceous than of sudoriparous glands with oleic acid, than palmitic and stearic. Further, in the last two the tint is grayish under the microscope. Cholesterin colors as late, but takes a brownish hue. Hence it is probable that the fat of the finger-mark is palmitin or stearin, with perhaps a mixture of cholesterin.

Unna sums up his studies in these words: "It is irrefutable that the ordinary sweat glands in man secrete fat, which at any time can be proved both on sections of skin and in the sweat of the hand by means of treatment with osmic acid—a fat which, though similar to that of sebaceous glands, is different from it, as stearic and margaric acid are from oleic acid." J. C. J.

Xeroderma Pigmentosum. ZEFERINO FALCÃO, Lisbon (*Ann. de dermat. et de syph.*, vol. v, No. 5, May, 1894).

The case is the first reported from Portugal, and its chief interest lies in the family history of the child, given with great care and minuteness. Tuberculosis, rheumatism, probably gout, figure prominently on both sides of the house. There was no history of cancer, nothing in direct connection with the disease, except the presence of lentigo in both parents, eczema in the mother, and chronic paludism in the father—a condition in Portugal which causes deep pigmentation to follow the slightest scratch.

At the age of five months telangiectasis appeared on the cheeks; at fourteen months the usual erythema, followed by pigmentation, winter intervening. This lends color to Taylor's theory that the vascular changes are the starting point of the disease. The process advanced with great rapidity, being in the third stage of tumor formation by the twentieth month, and involved face, scalp, neck, arms, and legs.

Microscopic examination of a tumor revealed a flat-celled, lobulated epithelioma whose cell nests were in intimate connection with the glands of the skin. Among the various forms of cell inclusion were found bodies

having the appearance of coccidia. The author thinks the hypothesis very reasonable that in xeroderma pigmentosum we have a lentiginiform psorospermiosis of a most striking appearance. If that is really his belief, why not so call his paper? Anything is better than confounding dermatological confusion with "*Un cas de dermatose de Kaposi.*" J. C. J.

Evolution of Syphilis. Precocious Tertiariism. A. FOURNIER (*Gazette méd. de Paris*, Nos. 49, 50, 51, and 52, 1893; No. 1, 1894).

Of a total of 3,032 syphilitics, Prof. Fournier discovered, during the first year of the disease, tertiary manifestations in 158, a much smaller number than that found in the second, third, and subsequent years, up to the eighth. In the eighth, ninth, and tenth, however, the total about equaled that of the first year.

Precocious tertiariism appears in two forms, differing in manner of evolution. In the first, the commoner of the two, the disease began with the usual secondary accidents which, especially toward the end of the first year, merged suddenly into tertiary manifestations. The second was quite different, tertiariism appearing without transition immediately after the chancre. The primary sore was most often deep, destructive, sometimes phagedenic.

The manifestations of precocious tertiariism are by no means identical with those of late syphilis. The viscera, heart, lungs, aorta, rectum, usually escape; gummata of the cellular tissue occur only in the proportion of two or three to a hundred, instead of twelve to a hundred. It is the precocious tertiary lesions of the skin which are seen ordinarily, and they differ from those of late syphilis in these particulars: (1) Greatly predominating frequency of ulcerative forms over dry; (2) habitual tendency to multiplicity of localizations and consequently to wide dissemination; (3) "local gravity" of the syphilides, rapid extension, and rebelliousness; (4) their malignity, shown by the trend toward becoming gangrenous or phagedenic. Under the name "galloping syphilis," which he has seen only three or four times, Fournier designates that which kills in a few months. He cites a case in a girl of nineteen, in whom a confluent, ecthymatous eruption, fever, adynamia, and marasmus were followed by death in four or five months.

Manifestations on mucous membranes are less common. The genital and bucco-cæso-phageal suffer most. The lesions have the same grave character as on the skin and are quite as rebellious to treatment.

Affections of the nervous system come next in frequency. Localizations in nerve trunks offer four principal types, two in motor and two in sensory nerves. Facial hemiplegia yields to treatment: optic and auditory neuritides are serious, ending sometimes in atrophy.

Cerebral manifestations are very diverse. Some consist in isolated symptoms, aphasia; others, more commonly, are complex, constituting what is known as cerebral syphilis. The latter may occur as early as the third month, even, but generally appears at the close of the year. They are curable, but the cures are often incomplete; they are subject to relapse, they may end in irremediable losses. They are not clinically distinguishable from the manifestations of brain syphilis of more advanced stages.

The malignity of precocious nervous tertiariism is found in the accidents of medullary origin. These myelopathies are relatively common; they occur

more commonly in the first half year than in the second; their gravity and malignity are great. Gibert and Lyon found sixteen deaths out of fifty-two. Death is produced by extension of the lesions to the upper portion of the cord. They are rebellious, insensible to specific treatment, and prone to relapse. Death in the first year of syphilis comes habitually from involvement of the nervous system, of the brain, or, more often, of the cord. (*Annales de dermat. et de syph.*, t. v, No. 6, p. 745.) J. C. J.

Unusual Site of a Primary Lesion. DR. VOLL (*Münchener med. Wochenschrift*, 1895, No. 5).

The patient was a servant girl who had an exulcerated chancre on the right side of the back in the region of the tenth rib. The lesion was accompanied by secondary symptoms. The *modus infectionis* could not be found out.

Item.

American Dermatological Association.—Programme of the nineteenth annual meeting, to be held at the Windsor Hotel, Montreal, Canada, September 17, 18, and 19, 1895. (1) Address by the President, by Dr. S. Sherwell; (2) Angiokeratoma of the Scrotum, Raynaud's Disease of the Ears, Report of Cases, by Dr. J. A. Fordyce; (3) Two Cases of Hydroa Vacciniforme, by Dr. J. E. Graham; (4) Two Cases of Bromide Eruption, by Dr. G. T. Jackson; (5) The Value and Limits of Usefulness of Electrolysis in Dermatology; *general discussion*; (6) Dermatological Notes, by Dr. W. A. Hardaway; (7) The Epithelial Layer of the Epidermis and its Relationship to Ichthyosis Congenita, by Dr. J. T. Bowen; (8) Remarkable Drug Eruption, by Dr. F. J. Shepherd; (9) A Hitherto Undescribed Sequel of Non-Parasitic Sycosis, by Drs. J. A. Cantrell and J. F. Schamberg; (10) The Infected Scratch and its Relations to Impetigo and Ecthyma, by Dr. H. G. Klotz; (11) A Contribution to the Study of Mycetozoa, Dr. J. N. Hyde; (12) Unusual Papulo-Pustular and Fungating Bromide of Potash Eruption in a Baby—Illustrated, by Dr. G. T. Elliot; (13) An Etiological Puzzle, by Dr. J. C. White; (14) Studies on some Dermatological Subjects, by Dr. A. R. Robinson; (15) A Unique Case of Agminate Folliculitis of Parasitic Origin, by Dr. M. B. Hartzell; (16) Note on Antiparasitic Treatment of Eczema, by Dr. J. Zeisler; (17) The Treatment of Erysipelas based upon a Second Series of Fifty Cases, by Dr. C. W. Allen; (18) Notes on Drug Eruptions, by Dr. J. A. Fordyce; (19) A Further Study of Alopecia Præmatura and its Most Frequent Cause, by Dr. G. T. Elliot; (20) The Prevalence of Germ Dermatoses, by Dr. J. C. White; (21) Symbiosis of Cutaneous Eruptions, by Dr. J. Zeisler; (22) Sleep in its Relation to Diseases of the Skin, by Dr. L. D. Bulkley; (23) Exhibition of Photographs of Unusual Cases, by Dr. H. W. Stelwagon; (24) (title to be announced), by Dr. S. Lustgarten; (25) Urticaria Pigmentosa—Case Twenty Years under Observation, by Dr. P. A. Morrow; (26) Note on the Elastic Circular Bandage, by Dr. G. H. Fox.

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XANTHOMA DIABETICORUM (SO CALLED). ITS PLACE AMONG THE DERMATOSES.

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THE selection of this subject for a thesis* was influenced by two considerations: first, the study of one of the very rare examples of this interesting affection which has fallen under my personal notice; second, the failure in the latest works on dermatology to recognize its peculiarities, both in symptomatology and pathology, and its claims for a place, distinct and separate from that of ordinary xanthoma, among the dermatoses. Among recent treatises, two of the more prominent may be cited as sufficient to show the general trend. Kaposi,† in the fourth German edition of his work, considers the question of the identity of the two forms still undecided, but thinks it worthy of further study. Heitzmann,‡ in Morrow's *System*, without reviewing the evidence at hand, claims that xanthoma diabeticorum is not a distinct affection, and that the seeming differences are easily accounted for. Publication of the article may be excused on the ground of the relapse in the case, more extraordinary in many respects than the original attack already reported.

History.—An account of the initial appearance of the disease in my case will be found in this JOURNAL (May, 1894, vol. xii, p. 205). There is no necessity for a repetition of what has already been said,

* Presented to the Society of Dermatology and Genito-Urinary Surgery.

† *Pathologie und Therapie der Hautkrankheiten*, p. 748.

‡ *System of Genito-Urinary Diseases, Syph. and Derm.*, vol. iii, p. 486.

and I shall pass on to a short account of the second attack, merely remarking that the first presented the classical features of the xanthoma, with the additional involvement of the soles of the feet.

The nodules began their involution in the winter of 1894, simultaneously with the improvement of the patient's diabetes and general health, disappearing in the reverse order of their appearance—viz., legs, back, buttocks, arms. The disease has never faded completely since its first outbreak. The lesions on the knees and the plaques on the soles, the latter the last in order of evolution, have always persisted. Ulceration has not at any time been a part of the morbid process, and the disappearance of a nodule leaves absolutely not a trace upon the skin. In March, 1894, the patient's urine contained less than one per cent of sugar, and the cutaneous disease was then confined to his right wrist, knees, and soles. In the fall of the same year he began to drink heavily; the amount of urine passed, and the proportion of contained sugar, increased day by day, until the latter reached eight per cent and the eruption began to reappear. Its development was far more rapid than in the original attack, the recrudescence being complete in December.

The activity of the process was clearly shown by the fiery red color of the lesions, in marked contrast to the pale pink seen during involution. (This observation confirms Török's statement * as to the tint, in which he is singularly correct, in view of his never having seen a case. At the same time it controverts that of Payne.) The shade may be aptly compared to that of raw beef. When stripped, the patient presented a remarkable spectacle. Over the knees the nodules had coalesced into enormous plaques, four by eight inches in size, dotted here and there with the yellow central point of the individual lesion. The extensor surfaces of the arms were in almost the same condition, the chest and abdomen were involved for the first time, and on the buttocks and backs of the thighs a ten-cent piece could not be laid on a clear surface. The dorsa of the feet and toes showed scattered and confluent papules, and the plantar plaques were increased in size. The genitalia were still uninvolved, but two surfaces, previously free, were attacked. These were the face, on the edge of the alæ and tip of the nose (not, however, on the lids), and the backs of the hands and fingers, on which the nodules coalesced as on the toes. It was impossible, of course, to count them, but the lesions could not have numbered less than twenty-five hundred. The subjective symptoms were excessively annoying, often preventing rest in the recumbent posture. Any pres-

* *Annales de dermat. et de syph.*, Nos. 11 and 12, 1893.

sure on them produced a sensation of tenderness and prickling, and on account of the extreme hardness it seemed to the patient as though he were lying or sitting on a bag of shot.

The disease remained in this condition for two or three months, but in April, 1895, began slowly to grow paler, after a trip to the seashore, following as before an improvement of the diabetes and the health generally. It is a curious and notable fact that, while whisky was kept from the man, no involution took place, but, on allowing him a regular daily portion (a pint and a half, ordinarily), improvement began. It seems likely that every exacerbation of diabetes will be followed by an outbreak of the skin affection. No local treatment has ever been attempted, for the reason that I have little faith in local applications except electrolysis, which the patient declines and because general improvement is surely followed by fading of the cutaneous disease.

Ætiology.—The origin of the disease is, like many others in the field of dermatology, more or less shrouded in obscurity. The connection, causal or otherwise, between diabetes and this form of xanthoma is not understood; its very existence is denied, and with apparent reason, in view of the cases with an identical clinical history and histological characters bearing close resemblance to those found in so typical a case as mine.

Twenty-one cases have been reported up to this time (see appended bibliography). The light which they shed upon the ætiology of the affection is not brilliant. Twenty of them have occurred in men; one only in a woman, reported by Hillairet. These patients, with the single exception of the first—that of Addison, a young man of twenty-six—had arrived at middle life. In seventeen, diabetes mellitus was present; in Bristowe's case it followed the eruption; in Cavafy's and my own it preceded the xanthoma. Hutchinson, Besnier, Vidal, and Payne failed to discover a glycosuria in their cases. The eruption itself led Crocker to the discovery of diabetes in the man under his care. It seems to me that too much has been made of the absence of sugar in the urine of these people attacked by a transient xanthoma. The glycosuria (I use the word here in its most limited sense) may have been temporarily absent, but it is not necessary now to have recourse to this explanation. Von Noorden and Oertel, in their respective articles on Diabetes and Obesity recently published in vol. ii, *Twentieth Century Practice*, give the weight of their opinion to the theory of the identity, ætiological at least, of these two conditions. Sir Dyce Duckworth* in-

* Chronic Glycosuria in Middle and Advanced Life. *Brit. Med. Journ.*, October 7, 1893.

clines evidently to the same belief from his recent utterances. A discussion of this belief would be out of place here, but it is interesting to note how often obesity in varying degrees occurred in the twenty-one cases. Including those frankly described as diabetic (Barlow's case is omitted for the reason that much doubt attaches to it), no less than eleven are described as remarkably stout, of florid appearance, or obese; in two the condition was well nourished, stoutness not being marked; two more were cooks and presumably suffered from their occupation and its temptations; two were drinkers and addicted to the pleasures of the table; in the remaining three nothing is reported concerning the nutrition, but the number includes Addison's case, a diabetic. Payne, who failed to discover diabetes, says his man "was inclined to be stout and florid." In view of their all but uniform occurrence there seemingly must be a connection between the vice of constitution expressed in the obesity and diabetes and the transient xanthoma occurring in these cases.

Chambard * believes that the disease is due to a special diathesis—i. e., it is a xanthomatosis. This is an explanation which explains nothing. There is certainly a tendency in the constitution of the individual to the formation of these lesions, but that offers no solution of the difficulty. The theory that they owe their origin to the same factors which give rise to the diabetes (nervous, pancreatic, gouty, or rheumatic [Duckworth], poisoning by phloridzin [von Noorden]) is difficult if not impossible of proof. The most, and to my mind the only, reasonable explanation is that xanthoma diabeticorum is an irritative process, the irritation being supplied by the excess of glucose or some faulty product of metabolism circulating in the blood—a theory suggested by Török and Kaposi. What the particular substance may be will doubtless be discovered when the pathogeny of diabetes is fully elucidated. Color is lent to this proposition by the fact that the nodules of the disease begin in the corium in the neighborhood of the sweat glands and hair follicles with their attached sebaceous structures, all of which are supplied by the same set of vessels, part of the excretory apparatus of the skin. It has occurred to me that the irritation might be occasioned by the effort of the organism to rid itself of the sugar excess through this channel, as well as through the renal filter, an analogue of the process in scarlatina.

Hallopeau,† after studying his case of transient xanthoma, still believes that xanthomata are *nævi* localized in the same way. The glycosuria in the particular affection under discussion he regards as due to

* *Annales de derm. et de syph.*, vol. v, p. 348.

† *Ibid.*, vol. iv, No. 8.

a visceral localization of the lesions in the pancreas, and consequently holds that the xanthoma is even here the primitive process. He thinks that the possibility of involution and change of size according to the degree of repletion of the vascular system explains the intermittences of diabetic symptoms. There is no report of an autopsy on these cases, so that his theory, ingenious as it is, lacks confirmation. His reasoning, it should be said, is from analogy with icteric xanthoma, in which lesions have been found in the bile ducts (Kaposi).

It will be noticed in the bibliography that eleven of the cases had been reported in the last five years, while forty were required to collect the first ten. It seems likely that with a wider spread of knowledge of dermatology the instances will be multiplied until xanthoma diabeticorum ceases to be classed among the rare dermatoses.

Histology.—The pathological anatomy has been investigated by Robinson, Crocker, Clarke in the second of Morris's cases, Payne, and recently by Schamberg. There is little to add to their reports. The general consensus of opinion seems to be that the diseased process bears some resemblance under the microscope to that of ordinary xanthoma, but that inflammatory changes are more marked and connective-tissue increase less noticeable in the diabetic form. The papule begins and remains throughout its whole course localized in the corium in the neighborhood of the sweat glands and follicles chiefly, as has been said. The corium is at first attacked superficially or toward the center, the process later involving the whole depth. The epidermis remains unaffected, except that the rete pegs disappear to a great extent and some of the cells become vacuolated. At the outset vascular dilatation takes place and persists, a slight oedema separates the tissue elements, and is followed by an infiltration of round cells, lymphoid corpuscles, and, according to Robinson, a proliferation of the connective-tissue cells. "Xanthoma cells," large, multinucleated cells with a fine membrane, including tiny droplets of fat, are found in xanthoma diabeticorum as in ordinary xanthoma, but are very few in a beginning lesion. They increase later and are proportionate in number to the size of the papule. Crocker describes them as epithelioid or giant cells.* The bundles of fibrous tissue swell, thicken, become translucent, and finally disappear or "appear rarefied," with large intervals. In the meshes a granular material is seen, composed chiefly of minute oil drops, not solely contained in the xanthoma cells, but resulting from their degeneration, finally taking their place, together with that of the connective tissue, and forming a confluent mass in the center. This mass of fatty

* Such they are undoubtedly, and in consequence little importance can be attached to them in view of their presence in numerous other pathological conditions.

granules gives the yellow center to the xanthoma nodule. There is then an entire central degeneration, with little or no connective-tissue increase, according to all investigators except Payne, who says that the elastic tissue "*appeared* to be much increased in amount, with little intervening tissue." He does not, however, himself regard it as a hyperplasia, but as a preponderance of elastic tissue in consequence of degeneration and absorption of the other constituents of the corium. Resolution presumably takes place by the absorption of the central granular mass and a regeneration of the fibrous tissue of the corium by the proliferated fixed cells already mentioned. In the words of Török (*loc. cit.*), "the lesions of xanthoma diabeticorum are caused by a local irritative process resulting in a granulo-fatty degeneration."

Classification.—I took occasion in the opening remarks in this paper to call attention to the place accorded xanthoma diabeticorum among skin affections. Opinion on the subject is fairly divided. Besnier and Doyon* unequivocally state that the sharp clinical points of differentiation and the histological findings in xanthoma vulgare and xanthoma diabeticorum establish only the variety, not the nonidentity of the two forms of the disease. Morris, Crocker, and Payne give this dictum only half-hearted support. Payne thinks that "the association of morbid changes seems to suggest that there is at least a common element in the three forms (including elastic xanthoma), and that the differences may not be essential but may depend on necessary circumstances." Török (*loc. cit.*) advances a diametrically opposite view, classing the glycosuric as a distinct affection with no relation to the common form.

It is necessary, therefore to review the clinical and microscopic points of diagnosis between the two varieties. The former have been embodied in a report by Sangster and Crocker† to the Pathological Society of London on the first of Malcolm Morris's two cases, a report which has since been extensively quoted. The clinical differential points are these: (1) The most important, and a divergence sufficiently great of itself to demonstrate the dissimilarity of the two forms, viz., the sudden evolution and involution of xanthoma diabeticorum, the latter invariably taking place spontaneously at some time in the history. In ordinary xanthoma involution is extremely rare, and when it does occur takes place almost imperceptibly. In fact, such an event is very doubtful. (2) The lesions in xanthoma diabeticorum are firm and solid, inflammatory, discrete or confluent papules; in xanthoma they are soft, inflammatory phenomena are absent, and the disease occurs

* Kaposi, *Maladies de la peau*. Traduction, second edition, vol. ii, p. 335.

† *Path. Trans.*, 1883, p. 284

chiefly in flat patches or striæ, which are never found in the first form. (3) The yellow center is not visible at first in the diabetic affection nor in all the papules at any time; in *xanthoma vulgare* the chamois-leather appearance is always to be seen. (4) An unimportant distinction—*xanthoma diabeticorum* is never found upon the eyelids; its preference is for the joints and extensor surfaces generally. (5) Subjective symptoms, though they may be slight, are the rule in the first variety. They are totally absent, except in case of ulceration, in ordinary *xanthoma*. (6) Jaundice has never been found in *xanthoma diabeticorum*. (7) Glycosuria, often transitory, has been found in a large majority of the cases, and those in which it was absent showed at least a related condition of plethora and obesity. Moreover, it is possible that the nutritive disorder was in abeyance at the time of examination. Diabetes has never been found with the ordinary form except in a case of Besnier's, to which little importance need be attached, since it is an isolated instance of a concurrence of two totally unrelated diseases. (8) The lesions of *xanthoma diabeticorum* occur in the neighborhood of the hair follicles and skin glands, a localization not observed in the common disease. To these may be added: (9) Ulceration is never a part of the process in diabetes; it has been seen in *xanthoma multiplex* (Morrow's case).

Histologically, the only point of resemblance in the two processes is the presence of so-called *xanthoma* cells, giant cells in reality, in *xanthoma diabeticorum* containing minute droplets of oil. Their importance in diagnosis has already been discussed. I shall refer here again to Török's able paper (l. c.) for a comparison of the pathological conditions. The tissue of *xanthoma multiplex* presents a striking analogy to adipose tissue, the analogy being borne out by the cells, which are identical with those of physiological fat in process of formation; further, by the formation of these cells around the vessels, in their adventitia even; by the discovery of cells analogous to those of *xanthoma* in imperfectly developed adipose tissue. The fat formation does not proceed to the point of occupying the whole cell as in true fat, nor does the cell break down into a granulo-fatty detritus as in *xanthoma diabeticorum*. To explain this arrested development, Török concludes that "ordinary *xanthoma* * is formed of adipose tissue in a heterotopic situation, and that it is constituted, by reason of that heterotopia, of fat cells of incomplete, interrupted evolution." To the formation of fat must be added, in some cases, that of fibrous tissue. The cells are of connective-tissue origin, as are those of fat in other situations.

* Abstract, JOURN. OF CUT. AND GEN.-URIN. DISEASES, vol. xi, p. 225.

Xanthoma vulgare is then "an anomaly produced under the influence of congenital and hereditary conditions by proliferation of connective-tissue cells and by their transformation into fat cells in places which are normally free from adipose tissue.* It is an anomaly of formation." In other words, it is a benign tumor, and its place is with its analogue—lipoma. Contrast this with a formation showing every evidence, clinically and microscopically, of inflammation resulting in a degeneration *en masse* of the central portion of the papule. Does it seem proper to class them together as varieties of the same disease, ignoring the fact that xanthoma multiplex is an anomaly of formation, and xanthoma diabeticorum an inflammation due to an irritative process ending in a granulo-fatty degeneration? It seems to me that it has ceased to be a matter of opinion; one must recognize facts.

In accordance, then, with the differences pointed out, xanthoma multiplex is properly placed and named—there is no necessity for the name "ordinary or common xanthoma"—xanthoma vulgare. It is xanthoma *par excellence*, a yellow tumor. Xanthoma diabeticorum has never been satisfactory. Lichen, proposed by Sangster and Crocker, is objectionable on many grounds. Török's term—"a papular eruption of diabetics due to a granulo-fatty degeneration"—is too long for convenient use. I would propose as a substitute dermatitis xanthomatoides diabeticorum—in other words, an inflammatory skin disease which occurs in diabetics who have a personal idiosyncrasy leading to the formation, and which *resembles* xanthoma. That seems to cover the ground. Further, the affection should be classed among the inflammations with the other "dermatoses diabeticæ," not with tumors, tumors even of inflammatory origin, such as the syphilides and lupus, because dermatitis xanthomatoides has a tendency to spontaneous resolution. I should retain the term diabeticorum, for the reason that I believe diabetes is the true underlying condition, and see no object in a change to glycosuricum, even if the disease is manifested in a transitory fashion.

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* Whatever may be the individual opinion of the adequacy of Török's explanation of the arrested development in xanthoma cells, the fact remains that they are of connective-tissue origin. Hence the objection in no wise weakens my argument.

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The report of Vidal's and Hutchinson's cases I have been unable to find ; the case reported, according to Besnier, to Chambard by Hillairet, a glycosuric woman, is undoubtedly identical with that published by Gendre in his *Thèse de Paris*. Barlow's case should really be omitted, since so much doubt has been cast upon it, but I include it for the sake of completeness.

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A NEW TREATMENT FOR EPIDIDYMITIS AND ORCHITIS.

BY JAMES P. TUTTLE, M. D.,

THE pathological and bacteriological studies of epididymitis and orchitis have thrown no new light upon their treatment. The acute forms occurring during attacks of gonorrhœa are generally conceded to be due to the extension of the virus into the vas deferens or even into the testicle itself. This consensus of opinion, or, may we say, proved pathology, has afforded no aid either as to prevention or cure. Epididymitis and orchitis come where injections have been used and where only internal medication has been prescribed with almost equal frequency. The ætiology of the chronic forms is still an open question until syphilis, tuberculosis, and malignant neoplasms can be eliminated. There is no way by which we can positively diagnose the nature of a slowly swelling, painless epididymitis or orchitis until the disease has reached a comparatively advanced stage. In the cases of tubercular, syphilitic, or malignant variety urgency in treatment is never required. We must watch the case and collateral symptoms to determine its nature, and move upon the disease according to our conclusions. It is in the acute cases—those generally occurring during an attack of gonorrhœa, prostatitis, vesiculitis, or cystitis—that the patients most urgently desire our aid. Some of these have high temperature with little pain; others have much pain with only slightly elevated temperature, and the swelling is not proportionate to either the temperature or the pain. A slight swelling in the testicle itself is more painful than quite a large one when due to effusion into the tunica vaginalis. The epididymis may be involved for days before the patient suffers from anything more than a sense of weight and dragging in the organ, and yet the feeling of *malaise*, slight rigors, headache, and high temperatures exist. The high temperature and rigors may be periodical and resemble malaria, but such cases are likely to develop into tuberculosis.

The various treatments advised for the acute form are all directed to the relief of pain, by reducing the tension, producing absorption or diaphoresis, or by counter-irritation. Strong solutions of nitrate of silver have been advised, but I have never seen any good follow them. Ice poultices have never relieved the pain nor aborted the disease in my experience. The actual cautery, if used forcibly enough to do good, leaves ulcers, and is so painful that patients rebel against its application. Hot poultices, with or without tobacco, together with

veratrum viride internally, have given the most relief in my hands, until by an accident two years ago I tried the application of guaiacol along the upper portion of the scrotum and cord. We all know the power of this drug, locally applied, to reduce temperature and quiet pain. It was with this view that I first applied it in a case with a temperature of 104° F. To my surprise, in two hours afterward the temperature was reduced to 99.5° , and the pain, which had been intense, was entirely gone. It is true that hot applications were applied in this case within a half hour after the application of the guaiacol, but I have not seen hot applications alone relieve the pain or reduce the temperature with such rapidity. The method of applying the drug is the same as that used elsewhere. Ten minims are dropped into a butter plate or small receptacle and then painted along the line of the cord and the upper portion of the scrotum. This is left uncovered for half an hour, the testicles and scrotum being elevated in the meantime. After this hot applications are applied to the swollen organ according as the practitioner prefers. My own method consists in laying the testicle upon the abdomen, covering it with a layer of flannel wet in hot water, and laying over this an ordinary English ice-bag filled with water as hot as the patient can bear. This retains the heat much longer than the ordinary poultice, and if not filled too full produces a slight compression without pain, and gives us the full advantage of a poultice without the dirty mess of ground flaxseed meal and tobacco smeared upon the parts. These hot applications are kept up until bedtime, when the patient is directed to apply an ointment of twenty-five per cent ichthyol in lanoline. This is surrounded by rubber protective tissue and the organ supported in either a suspensory or with other apparatus, holding it up on the abdominal wall. On the following morning the hot applications are renewed for from a half to one hour and then the ointment is reapplied until evening, when the same process is repeated. In case the pain and temperature have not been relieved, or have returned, the application of the guaiacol may be renewed, but generally it is best not to do so until thirty-six hours later. In all the cases which I have treated, seven in number, I have never had to apply it more than twice, and it has never failed to relieve the pain within two hours after the application. After the pain and temperature have subsided the application of the hot bag for one hour twice daily and the internal administration of saline cathartics once a day and small doses of iodide of potassium will hasten the absorption of the induration. I have not had the success which is claimed by the most prominent authors in strapping and compression to reduce the size of the swelling.

The following seven cases, though few in number, have suggested my reporting this method to this body:

M. D., merchant; aged thirty-two; has had chronic posterior urethritis for the past twelve months; consulted me October 28, 1893; had large sound passed five days since; has had slight pain in right testicle for past three days, with feeling of *malaise* and occasional chilly sensations; has had no distinct chill; testicle is much swollen; effusion into the tunica vaginalis; epididymis tender and enlarged; tenderness all along the cord; temperature 104° ; applied guaiacol, fifteen minims, along the cord and upper portion of the scrotum at 9 p. m. Advised hot applications through the night.

October 29th, 1 P. M.—Temperature 99.5° ; tenderness much less; pain almost entirely gone; applied five minims guaiacol as before; continued hot applications until night, and the ichthyol ointment was applied and a saline cathartic ordered for the morning.

October 30th.—Temperature normal; pain and tenderness almost entirely gone; hot applications and ichthyol ointment continued; patient left his bed on November 2d. Iodide of potassium, ten grains *t. i. d.*, was prescribed, a suspensory, and the use of hot applications twice daily for a half hour at a time. He made an uneventful and rapid recovery, with very small nodular induration in the lower lobe of testicle.

B. L., aged thirty-five; barkeeper; had gonorrhœa for three weeks; developed pain in testicle March 28, 1894; consulted me April 2d; left testicle swollen to about twice its normal size; inflammation seemed confined to epididymis, which was large and nodular, very painful, and indurated; there was some effusion into the tunica vaginalis; temperature, 103.5° ; applied ten minims guaiacol along cord and extreme upper portion of scrotum at 10.45 a. m. Saw patient at 3 p. m.; temperature, 99.5° ; had not had any pain since one o'clock; applied hot-water bags for two hours; ichthyol ointment at night.

April 3d, 2 P. M.—Very slight pain; temperature, 100° ; applied guaiacol, eight minims.

April 4th.—No pain since last application; temperature normal; epididymis still swollen, but with very slight tenderness; advised hot-water bags twice a day, with ichthyol ointment in the interim; saline cathartic in the morning and iodide of potassium, ten grains, three times a day.

May 1st.—Testicle almost entirely normal; very slight indurated nodular lump in lower lobe of epididymis; patient passed out of sight.

S. R., aged twenty-four; traveling man; had gonorrhœa for about six weeks; developed epididymitis three days previously; consulted me April 5, 1894; testicle and scrotum largely swollen; epididymis ex-

ceedingly tender to touch; pain all along the line of the cord; temperature, 102°; pulse rapid; had taken saline cathartic that morning; applied ten minims of guaiacol along the cord and upper portion of scrotum at 12 M. Saw patient at 4 P. M.; pain almost entirely relieved; temperature, 99°; advised hot applications and ichthyol ointment as described above.

April 6th, 12 M.—Patient slept well last night; temperature normal; no pain in testicle up to present; it is still tender to the touch and much swollen; applied five minims of guaiacol as before; advised use of hot water, ichthyol, and iodide of potassium, and saline cathartic as above.

May 26th.—Patient left hotel next day after seeing; went to the country, where he has been riding horseback and enjoying himself; kept up the hot-water applications for ten days; has continued the iodide since and now retains but a small induration in the upper lobe of the epididymis; feels perfectly well.

C. P., aged about fifty; suffering from syphilis; developed acute epididymitis in right testicle, July 20, 1894; pain acute; swelling very slight, confined to epididymis; temperature, 99°. Applied guaiacol, ten minims, 11.30 A. M. Saw patient at 4 P. M.; pain entirely relieved; temperature normal; hot-water applications and ichthyol advised as before; there was no necessity of applying the guaiacol the second time on this side. Three days later developed similar symptoms on the opposite side. The same treatment was carried out once only, and within a week all symptoms of the disease had disappeared without any induration. This was not a case of gonorrhœal epididymitis, as patient had nothing of that kind, but one in which the element of syphilis might have been very justly considered.

L. W., aged thirty-three; traveling salesman; consulted me May 24, 1894; has had a chronic gonorrhœa for some months; has tubercular history; has felt indisposed, with occasional chilly sensations, for the past four or five days; has noticed no pain in his testicle until this morning; his testicle itself is hard, not very tender, enlarged to about twice the normal size; the epididymis is slightly swollen, more tender than the testicle itself, and distinctly nodular; patient's temperature, 103°. Advised to go to bed at once. I applied ten minims of guaiacol at 1 P. M., elevated the testicle, and applied the hot-water bag and moist flannel half an hour later. At 5 P. M. temperature 100°, pain imperceptible, and tenderness much reduced; advised continuation of hot-water applications and guaiacol at bedtime and a saline cathartic in the morning.

May 25th, 1 P. M.—Patient's temperature 100.5°; pain and ten-

derness have returned somewhat; swelling about the same; applied ten minims of guaiacol; advised the continuation of the hot-water bag and ichthyol ointment as before.

May 26th.—Temperature normal; pain gone; tenderness much reduced; patient felt so well he wished to get up; kept him in bed for three days; in the meantime the epididymis continued to enlarge, became somewhat nodular, and he had slight evening temperatures. At this time I strongly suspected tubercular disease, and am not sure to this date but that there was a tubercular element in the case. However, in consultation with Dr. E. L. Keyes, decided to put him on general treatment with iodide of potassium, hot applications to the testicles, and as much rest as possible.

September 1st.—Patient has entirely recovered, and it is almost impossible to find any induration in the testicle.

A. N., professional nurse; after lifting patient was seized with intense pain in right testicle; consulted me two hours later, when I found testicle tender and small nodule in the epididymis; temperature, 99°. Applied guaiacol, ten minims, upon the upper portion of scrotum and cord; patient continued about his work; applied the hot water at intervals as often as possible until bedtime, when he put on the ichthyol ointment, and continued this treatment for several days, when every symptom of his disease had disappeared.

C. S., railroad conductor; has had a chronic posterior urethritis for several years; consulted me January 30, 1895; some days ago noticed slight rigors, feeling of *malaise*, and heavy weight and dragging in the scrotum; has now a temperature of 101.5°; testicle and epididymis largely swollen, tender to the touch. Applied guaiacol, ten minims, in my office at 4 p. m. Advised patient to go home and rest in bed, apply hot applications until ten o'clock, and then put on the ichthyol ointment.

February 2d.—Patient returned; says he has had no pain since he was in my office. Swelling largely reduced; epididymis nodular and indurated.

June 1st.—Patient returned with slight induration in lower lobe of epididymis, but has had no other symptoms of the disease and feels perfectly well.

These results are no better, so far as the final issue is concerned perhaps, than those obtained by other methods, but the immediate relief of pain, the very short period of confinement, and the absence of any untoward symptoms or results convince me that this method is an improvement upon anything which I have met in the treatment of this disease.

One precaution is necessary, however. The guaiacol should never be painted upon the lower portion of the scrotum or upon the scrotal tissue proper, as it is liable to produce excoriations in some individuals, and only the pure Merck's guaiacol should be used.

AUTOCHTHONOUS SYPHILIS IN BOLIVIA AND PERU.

By ALBERT S. ASHMEAD, M. D.,

New York.

THERE are in South America three great tribes of Indians; in the order of numbers, Quechuas or Incas of Bolivia and Peru, Guaranis of Brazil and Paraguay, and the Aymaras of Bolivia and Peru. The latter amount at present to three quarters of a million. They are the real Titicaca race, and inhabit the most northern part of Bolivia and the south of Peru. Until their subjugation by the Quechuas or Incas* they were an entirely separate race. That they have lived a very long time in the mountainous region which they occupy now is proved by a number of anatomical peculiarities which all belong to very high altitudes with steep slopes. Primitively they lived at a height of ten thousand to fifteen thousand feet, and were only driven by the Incas to inferior altitudes in which they rapidly and considerably declined. These anatomical features are: Extraordinary length of trunk; enormous development of chest; shortness of legs, arms, and feet; great relative difference in proportion of the parts which compose these members.† Forbes deems these characters due to the altitude and to the rarefaction of the air, the latter showing also its action by the frequency of varicose conditions of the surface veins of legs. The large development of the chest allows these Indians to breathe the attenuated air of the high regions with less liability to the development of "puna," a kind of pulmonary inflammation, brought on by overexertion of the lungs in such people as are not organized for these parts. (Onions are the empirical remedy used against this pneumonic disease, in man and beast. It may be that the consumption of this vegetable diminishes the demand for oxygen.) According to Tschudi, the puna does not develop below twelve thousand feet of altitude.

Among the peculiarities mentioned the most remarkable seems to

* Early part of eleventh century, first to third Inca chiefs' period.

† The thigh is shorter than the leg, which is not the case in any other race.

me the shortness of the foot, due to the absence of calcarean protuberance. Of all human races, this protuberance is most strongly presented in the negro type, which has been developed in flat countries, jungles, and plains.*

We may safely conclude that a race which formed itself so completely in accordance with the nature of the countries now inhabited by it must have been established in them a very long time, for we know that such fundamental racial characters need ages for their evolution.

It was in this race that the indications of what may be called autochthonous syphilis are strongest. They are even remarkably strong. Here is what David Forbes, the man whose authority is unequalled in everything that regards this Indian population, says: "Both gonorrhœa and syphilis are known among the Aymara Indians." Forbes never met with any instance of an Indian disfigured by the disease, their treatment of it being successful. They employ mercury, metallic form, and calomel from native cinnabar. Chewing coca is said to prevent mercurial salivation.

"It would appear probable that syphilis has been known among these Indians from a very early period, because they have in their language a name for this disease (*cehaca-usu*, literally translated 'bone disease'; *huanti*, 'bubo'), because they are apparently quite familiar with its treatment; and, lastly, from the occasional occurrence of skulls taken out of graves dating from the period antecedent to the Spanish conquest, on which may be seen depressions or scars pronounced by several medical men to have resulted from syphilitic caries of the bone, and which in two instances which came under my observation afforded proof that the disease had been arrested in its progress and new bone formed during the lifetime of the individual.

"A very remarkable circumstance also is that the alpaca, an animal altogether peculiar and confined to these highlands of Bolivia and Peru, also suffers extensively from a disease which, in all its symptoms and effects, appears to be identical with syphilis in man, and which is treated by the Indians by a precisely similar mode of cure, consisting principally of inunction with mercurial ointment. Several white landed proprietors of Bolivia and Peru with whom I have frequently spoken upon this subject have assured me that the prevalence of this disease is the sole reason why they have such a repugnance to occupying themselves with the culture of alpaca wool, which as a commercial speculation, although an extremely lucrative one, has still been left

* Negroes have died out among the Aymaras. It is very rare to meet half-breeds between negroes and Aymaras.

entirely in the hands of the Indians themselves; the mortality among the alpacas caused by the disease, when not extremely carefully treated, is said to be very great indeed, and the bones of the diseased animals are stated to be very much affected by caries exactly as in man.

“The question whether this disease may have been communicated from the alpaca to man or *vice versa* is an open one. It is well known that such unnatural intercourse is common, and that under the Incas several laws were enacted against it. Even after the Spanish conquest an old law not permitting the llama-drivers to start on their journeys unless accompanied by their wives was retained in force, and this regulation was understood to be intended as a safeguard against such abuses.”

A further conclusion which we may draw from the facts just expressed is that the probabilities of the existence of syphilis in this part of the world before Columbus are almost overwhelming.

270 West Forty-third Street.

THE TREATMENT OF GONORRHOEA IN THE MALE BY URETHRAL IRRIGATIONS OF PERMANGANATE OF POTASSIUM.

By CHARLES GREENE CUMSTON, B. M. S., M. D. (Geneva).

Instructor in Clinical Gynæcology, Tufts College; Member of the Société Française d'Electrothérapie, etc.

IN the June, 1895, issue of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES I was pleased to see an article from the pen of Dr. F. C. Valentine on the treatment of specific urethritis after the method of my much-esteemed *confrère*, Dr. Pierre Janet, of Paris.

I have employed this treatment for the past two years, both in the male and female, with such excellent results that it is with pleasure that I contribute this short note on the subject, simply with the hope that I may help Dr. Valentine in his efforts at introducing this treatment among the practitioners of this country, as it certainly appears to me the most radical of all in this common but disagreeable affection of the genital system.

As to its use in the female, the reader is referred to a clinical lecture on the subject delivered by the writer, and which appeared in the *Annals of Gynæcology and Pædiatry*, June, 1895.

My method of irrigation with potassium permanganate in the male differs somewhat from that employed by Dr. Janet, inasmuch as the

entire urethra is irrigated, but not the bladder, as it has appeared to me that if the disease is controlled at the commencement, when seated in the anterior part of the urethra, it is unnecessary to apply the solution to the above-mentioned viscus.

A conical bulb rubber catheter * perforated by three pin-point holes at the base of the cone, thus giving a recurrent flow, a glass irrigator, to which is attached five feet of rubber tubing, is all the apparatus.

The irrigator holds one litre, a quantity which I have always found sufficient for one irrigation. The catheter is attached to the tubing by a glass point.

The strength of permanganate employed by me is always 1 to 3,000, as I have found this well borne by the patients, pain only being produced by the first and sometimes by the second irrigation. At the same time this solution has always been found quite strong enough for the destruction of the gonococcus.

One irrigation daily has been my practice, and the average number has been fifteen. The solution should be given at blood-heat.

A cover-slip preparation of the pus is always made at the commencement of treatment, a second one just before the fifth irrigation, and all following up to the end of treatment. In most of my cases, which number in all about thirty, Neisser's organism had disappeared after the tenth irrigation, but a very considerable decrease has been found after the fifth.

To give the irrigation the irrigator is hung about three feet above the patient, who is placed on a Kelly pad (with his trousers off) on a gynæcological table with the knees flexed, the feet being in the foot-rests. The patient urinates, after which the catheter, which has been boiled, is introduced about one inch into the urethra and the solution then turned on.

The catheter is slowly pushed back as far as the neck of the bladder, and the irrigation, which is slow, lasting about ten minutes, is thus allowed to wash the entire mucosa, which it penetrates as well, and by so doing attacks the gonococci hidden under the surface of the glands.

I here append four cases in private practice taken at random in my note-book :

Case I.—J. D., aged thirty, merchant. Consulted me four days after coitus, at which time he discovered a drop of pus. Cover-slip preparation showed an abundant quantity of gonococci. All trace of the organism had disappeared after the seventh irrigation. Discharge

* These catheters are manufactured by Messrs. George Tiemann & Co., under the name, believe, of Parker's sound.

disappeared after the eighth irrigation, but was continued up to the seventeenth, as the patient had had one kidney removed for gonorrheal pyelitis some three years previously, and I did not wish to have any secondary infection. Has remained well ever since (ten months).

Case II.—C. D., aged twenty-seven, janitor. Five days after coitus noticed a discharge, for which he consulted me on the following day. Cover slip showed many gonococci. This patient received fourteen irrigations. After the sixth the gonococcus had disappeared, while the discharge ceased after the tenth. Seen six weeks after treatment and was perfectly well.

Case III.—P. W., aged twenty-two, student. Six days after coitus noticed discharge and consulted me three days after. Cover slip showed many gonococci, which had disappeared after the tenth irrigation. He received seventeen irrigations, the discharge having ceased after the thirteenth.

Case IV.—S. W., aged thirty-eight, stock broker. Had been under my care for an old chronic cystitis with sacculated bladder. Noticed discharge on the day following a suspicious coitus, and consulted me immediately. Cover slip showed a few gonococci. This patient, on account of many previous gonorrhœal affections, was rather rebellious to treatment. The gonococci had disappeared after the fifteenth injection. Five more were given, resulting in a cure of the local infection. Some two weeks after stopping the irrigations he developed a gonorrhœal iritis, which was some weeks before recovery took place.

From my not very extensive personal experience of about thirty cases, although I have seen it largely used by other Continental practitioners, I would offer the following conclusions regarding the treatment of gonorrhœal urethritis by irrigations of potassium permanganate:

1. The average duration of the affection is fifteen days.
2. Complications, such as cystitis, orchitis, epididymitis, arthritis, or bubo, are very infrequent. Chordee is less frequent under this treatment, although some of my cases suffered from it.
3. Ardor urinæ only lasts at most four days, usually only two.
4. That gleet is infrequent if the treatment has been properly carried out.

CHANCRE OF THE TONSIL. REPORT OF A CASE.*

By T. C. EVANS, M. D.,

Lecturer on Ophthalmology and Laryngology in the Kentucky School of Medicine, Louisville, Ky.

ON February 14th Dr. A., from one of the interior towns of this State, came to consult me in regard to a throat affection. He said he had experienced some pain on swallowing, and had a slight elevation of temperature for the past three weeks. On examination I found the left tonsil considerably enlarged. A little anterior to the center of the tonsil was a deep, oval-shaped ulcer about three quarters of an inch in length, the long diameter being from above downward; the anterior margin of the ulcer involved that part of the tonsil covered by the anterior pillar of the fauces. The free margin of this anterior pillar was also involved in the ulcerative process. This ulcerated margin was from one half to three quarters of an inch in length; the ulcer both on the tonsil and the anterior pillar of the fauces was covered by a grayish-white membrane or exudate. The entire soft palate and uvula were very much congested, but not œdematous. The deep cervical glands were much enlarged, producing quite a perceptible external deformity.

The patient was a robust man of thirty-two years. I was satisfied that the ulceration was syphilitic, and from the general appearance of the throat, the clean-cut, "punched-out" appearance of the anterior pillar, the ulceration of the tonsil, the absence of œdema of the palate and uvula, the marked enlargement of the cervical glands, I felt almost sure the lesion was primary. I requested him to remove his clothing, when I found that over his chest and back his body was the seat of a papular eruption—the typical and unmistakable papular syphilide. The diagnosis was a complete surprise to the patient, who, by the way, is a married man. He could think of no possible exposure, and said that, so far as he knew, he had not a single syphilitic among his *clientèle*, which is composed almost wholly of a rural population. I think his statement is correct as far as he knew, as he is an honorable gentleman well known to most of the members of this society.

On my advice he sought the opinion of a number of throat specialists as well as the genito-urinary surgeons. At his next visit he told me they had all concurred in my diagnosis, and he accordingly began with antisyphilitic treatment.

* Read before the Louisville Clinical Society

Bulkley, in his recent work, *Syphilis in the Innocent*, in discussing the location of the primary lesion, says that extra-genital chancres "form possibly ten per cent of the whole."

The same author has tabulated the location of 9,058 recorded cases of extra-genital chancres; of these, there occurred on the lips, 1,810; on the breast and nipple, 1,148; buccal cavity, 734; fingers and hand, 462; eyelids and conjunctiva, 372; tonsils, 307; throat, 264; tongue, 157; chin, 146; cheek, 145; trunk, 100; nose, 95; arms, 87; perigenital, 77; legs and thigh, 73; forearm, 59; neck, 47; gums, 42; forehead and temples, 37; ears, 27; vaccination, 1,863; cupping and phlebotomy, 745; circumcision, 179; tattooing, 82. It will be seen from this table that three and one half per cent of all extra-genital chancres occur on the tonsil.

Then we must take into consideration the probability that a large proportion of the 734 recorded as occurring in the buccal cavity and the 264 in the throat were, in fact, chancres of the tonsil.

Bosworth says the consideration of the primary lesions in the fauces is confined practically to chancre of the tonsil. In view of this I think it probable that next to the lips the tonsil is the most frequent seat of extra-genital chancre, and that possibly ten per cent of all extra-genital chancres are tonsillar. The mucous membrane of the palate and faucial pillars, presenting as it does a smooth, dense tissue covered with squamous epithelium, offers little chance of infection. Hence it is not unreasonable to suppose that the syphilitic virus passes over this part of the alimentary tract, and finds in the open crypts of the tonsils a field most admirably fitted for its protection and growth. In most instances the infection takes place in a tonsil already hypertrophied, which seems to afford a favorable condition for the development of the disease. The early development of the secondary eruption appears to be rather characteristic of the tonsillar chancre. This is probably due to the large size of the initial sore and to the fact that the tonsil is so intimately connected with the lymphatic system, the eruption making its appearance in from two to four weeks. The eruption is, in most cases, papular in character, as in the case reported, still further confirming the rapid absorption, as the appearance of the papular syphilide is usually delayed until the third or fourth month.

Now in regard to the method of infection: The earlier writers on diseases of the throat dismiss the subject with the bare statement that "*chancres of the tonsil are due to bestial practices*"—a statement that later investigation has shown to be incorrect and unjust. While it is unfortunately true that a small proportion are undoubtedly contracted in this way, by far the larger proportion are traceable to other causes,

and most of them have been innocently acquired. Among the many causes alleged in the cases reported may be mentioned kissing, pipes, cigars, glass-blower's instruments, musical instruments, drinking vessels, forks, spoons, feeding bottles, of which transmission by kissing seems to be the most frequent. In looking up the question of extra-genital chancre I have been more than ever impressed with the great injustice done the profession, as well as the public, by the common custom of teachers and text-books considering syphilis as exclusively and essentially a venereal disease, forgetting or ignoring the fact that it is a contagious disease due to the entrance of a specific virus into the system; that it is venereal only in the sense that illicit sexual relations afford the most favorable conditions as well as the most frequent opportunity for its propagation. This undue attention to the venereal aspect of the disease, or, more properly speaking, the want of attention to its non-venereal aspect, has done untold harm by causing many an unfortunate but entirely innocent patient to feel himself degraded and disgraced, knowing as he does that the occurrence of syphilis is almost invariably associated with some loathsome sexual disorders both by the laity and the medical profession, and, to add to his humiliation, he knows that his statements in regard to the trouble to his family, intimate friends, and even his physician, are at best taken with a large degree of allowance. The failure on the part of the physician to appreciate the fact that syphilis may be transmitted by many other means than by improper sexual relations causes many cases to go unrecognized, as in the case reported, which had been seen by two physicians prior to the time the patient came to the city, neither of whom seem to have suspected the cause of the trouble. A similar lesion on the genitals, with the enlarged glands in the groin instead of neck, would doubtless have been diagnosticated by either of them without hesitation.

Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

TWO HUNDRED AND FORTY-THIRD REGULAR MEETING, HELD ON TUESDAY EVENING, APRIL 23, 1895.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case of Neurotic Eczema.—Presented by DR. J. A. FORDYCE.

The patient was a boy, aged twelve, who presented an eruption of minute papules and papulo-vesicles along the posterior surface of the right thigh, leg, and over the dorsal surface of the right foot. The papules showed in places a tendency to group themselves, but no diffuse patches were formed as in eczema. The lesions were very itchy. The clinical picture was not that of a zoster, although the eruption followed the cutaneous distribution of the sciatic nerve.

DR. S. SHERWELL said he regarded the case as one of neurotic eczema.

DR. L. DUNCAN BULKLEY said that when he saw the case about a week ago it impressed him as one of aborted herpes zoster, but as the lesions have remained unchanged since then that diagnosis would not hold good. He was inclined to accept the diagnosis of neurotic eczema. In one such case coming under his observation the patient, who was a lady engaged at literary work, had a recurrent attack of an eruption, very itchy, along the right arm whenever she subjected herself to prolonged mental strain.

DR. GEORGE T. JACKSON pronounced the case one of neurotic eczema. Two similar cases had recently come under his observation.

DR. GEORGE H. FOX referred to a little colored boy now under his care who has a peculiar crusted, eczematous patch on the vertex, and a band about two inches wide running down from this patch to the edge of the hair. He did not know whether the lesions followed the course of any particular nerve. In another case coming under his observation at the Vanderbilt Clinic some time ago there were patches of marginate seborrhœal eczema on both thighs and calves, with a narrow band running to the popliteal space, closely following the course of the nerve.

DR. E. B. BRONSON said in this case the eczema seemed to follow the course of the sciatic nerve; it corresponded very closely to the class of cases which have been described as neuritic, in contradistinction to the neurotic. In the cases described by Unna the lesions are more symmetrical.

DR. H. G. KLOTZ said he could not find any vesicles among the lesions in this case, and from their present appearance he did not care to venture a positive diagnosis. The fact should be borne in mind that various skin diseases may follow the course of a nerve. He had seen a case of syphilis in which the eruption was confined to such locations, and in one case of lichen planus seen last fall the eruption occupied the region of a thoracic zoster.

DR. FOX said that in certain cases of lichen planus the lesions seem to have a tendency to form a girdle around the waist; this peculiarity, so far as he

knew, had not been referred to in the text-books. In some cases the configuration and location of the lesions were very similar to those seen in zoster, other parts of the body being comparatively free from the eruption.

DR. FORDYCE, in closing the discussion, said that when he first saw this case it reminded him in certain of its features of both zoster and lichen planus, but the individual lesions did not correspond with those found in either of those affections. There were some minute vesicles, but the principal lesions were erythematous and papular in character.

A Case of Alopecia Areata.—Presented by DR. SHERWELL.

The patient was a married woman, aged twenty-seven years; a native of this country. She was married seven years ago, and had three living children; she had had no miscarriages. Her health was always good until her last parturition, when she gave birth, somewhat prematurely, to a small, healthy child, which is still alive. The patient suspected that she was again two months pregnant. Her husband was healthy. During the past year her health had been somewhat impaired, although she complained of nothing but nervousness and occasional attacks of palpitation.

Six weeks ago her hair began to fall out, a bald patch, about the size of a silver half dollar, first appearing at the vertex. This patch kept increasing in size until the present time, and the woman is now almost entirely bald, with the exception of a few hairs here and there. The scalp presents no signs of inflammation. The hair in the pubic and axillary regions is unaffected. No history of syphilis is obtainable, and there are no lesions in the throat or elsewhere pointing to that disease. When the woman first came under observation she had some eczematous lesions on the body.

DR. FORDYCE said he thought the case was undoubtedly one of alopecia areata.

DR. BRONSON said the case was a rather peculiar one, and did not correspond with alopecia areata, as we usually see it. If there is such a thing as a parasitic alopecia areata, he thought this was one of those cases.

DR. FOX said that leaving ætiology out of the question, there were certainly two clinical forms of alopecia areata—one the common form, where the disease leaves small, white, smooth areas which are perfectly bald and which gradually extend and run together; in the other form, of which this is probably an example, the patches spread more rapidly and the hairs become thinned out. In these cases some of the long hairs are left behind and will remain for many months, presenting quite a contrast to the ordinary form of the disease. As regards the ætiology, he was inclined to regard those cases in which absolutely bald patches appear as parasitic in origin rather than those cases where some of the hairs remain scattered over the scalp. In early syphilis we find the hair falling out, and that too without an eruption on the scalp, but he has never seen a case of late syphilis with a loss of hair which was at all suggestive of alopecia areata. He has seen patients with a healthy scalp with bald patches which were the result of a general deterioration in health.

DR. MORROW said if it were not for Dr. Sherwell's account of the development of this trouble, he would be inclined to throw out the diagnosis of alopecia areata and regard the case either as one of syphilitic alopecia or of defluvium capillorum, which might have some relation to her puerperal condition. Its clinical appearance was very similar to many cases of alopecia he had

seen occurring in early syphilis. Alopecia areata and syphilitic alopecia often closely resembled one another. From the characteristic mode of development in this case, as described by Dr. Sherwell, he was willing to accept the diagnosis of alopecia areata.

DR. JACKSON agreed with the diagnosis of alopecia areata. For this affection Raynaud highly recommends the following method of treatment, which he claims will effect a cure within fifty days :

Hydrarg. bichlor	0.5
Tinct. cantharidis.....	25.0
Bals. Fioraventi.....	50.0
Aq. Cologniensis.....	150.0

M. Sig : Use in the morning after washing the scalp with carbolic soap. Rub with paint brush for one or two minutes.

Ac. salicylic.....	2.0
Naphthol β	10.0
Ac. acetic, crystals.....	15.0
Ol. ricini.....	100.0

M. Sig : Use at night.

DR. JACKSON said in one case of alopecia areata in which he had employed this treatment a cure was effected within forty days, although the disease was of four years' standing. In a second case no benefit followed its use.

DR. C. W. ALLEN said that in one case now under his observation the patient, seven years ago, received a cut just above the brow, and immediately afterward a patch of hair fell out at the margin of the scalp, leaving a bald spot about the size of a silver quarter ; this spot has remained bald, leaving a perfectly smooth patch of skin, which looks like a patch of alopecia areata. This patient's brother, who occasionally uses the same towels and hair-brush, not very long ago developed a distinct patch of alopecia areata, and since then several other patches have appeared. At the present time the anterior half of the scalp is almost entirely bald. Dr. Allen said he did not know whether there was any connection between these two cases.

DR. BULKLEY said that in Dr. Sherwell's case there was considerable adenopathy on both sides of the neck. The surface of the scalp has not the appearance of a simple alopecia areata, but rather resembles a syphilitic alopecia. In the former we do not see so many strong hairs left behind. In many women, especially pregnant women, syphilis may exist without giving rise to many of its characteristic signs.

DR. KLOTZ said the case reminded him strongly of syphilis, although the history and development militated against that diagnosis. The case was somewhat similar to one observed about a year ago, when a woman came to the dispensary with complete alopecia extending over the whole body ; there was no history of syphilis and no lesions on the body. The woman gave a history of having had an eczema. Some time afterward it was learned that her husband was being treated for syphilis, and still later the woman developed a perioritis.

DR. SHERWELL, in closing the discussion, said he did not think the alopecia was of parasitic origin ; there were no signs of inflammation and no broken hairs, such as we often see about trichophytic patches. The scalp in this case presents peculiar depressions, to which none of the speakers referred. While

it is still possible that the case may prove to be one of syphilis, he had been unable to get any history of that disease, and the loss of hair was more rapid than he had ever seen even in general syphilis. He was rather inclined to believe that the loss of hair was due to neurotic causes.

A Case of Hypertrophic Rosacea.—Presented by DR. H. G. PIFFARD.

The patient was a man, aged sixty-four years, a native of the north of Ireland. He had formerly been a heavy drinker of hard cider and sour wines. Many years ago his nose gradually began to increase in size, becoming covered with large hypertrophied masses which gave rise to considerable discomfort and produced marked deformity. He came under Dr. Piffard's observation some months ago, and since then three operations have been performed, which have greatly reduced the size of the organ. These operations were done without the aid of an anæsthetic. At each sitting one of the hypertrophied masses was excised and the edges of the wound brought together and stitched. An application of caustic pyrozone readily checked the hæmorrhage, which was considerable. The man states that his father, who was a tremendous snuffer, had a large nose.

DR. FOX referred to a very marked case of hypertrophic rosacea coming under his observation where the lobules hung down so far that they almost covered the lip. These cases, he said, are more common in Germany than in this country.

DR. JACKSON referred to a case which recently came under his observation; this was turned over to Dr. McBurney, who removed all the hypertrophied tissue, and the man has now a nose which is almost as good as it ever was.

DR. ALLEN thought the chances for a brilliant result in these cases are better if the operation is done at one sitting under an anæsthetic rather than by doing it piecemeal. If it is considered wiser to operate slowly, he suggested that electrolysis might be tried instead of the knife.

DR. SHERWELL referred to a case upon which he operated two years ago. In that case the hypertrophied mass hung down like the bridle of a turkey, and the patient had to lift it up every time he wished to eat or drink. A broad V-shaped incision was made and a piece about as large as a man's thumb removed, which left a presentable although not a perfect nose.

DR. BULKLEY advised a radical operation. In one case of the removal of an epithelioma from the nose by Dr. McBurney, skin-grafts from the thigh were employed and a very good result obtained.

DR. E. L. KEYES said the objection to Dr. Piffard's method of treatment is that it leaves behind portions of the original tissue which may keep on growing. A radical operation with skin-grafting he considered preferable.

DR. BRONSON said that this form of hypertrophy seemed to occur in certain races. He had never seen it in a native of this country, and this was the first case he had seen in a native of Great Britain. Hebra attributed it to the use of sour wines, and has described various forms of rosacea incident to different varieties of indigestion.

DR. PIFFARD said he operated upon this man without an anæsthetic because he believed, with the late Dr. Frank Hamilton, that operations did better if performed without an anæsthetic, and that the latter should be dispensed with if the patient was able to bear the pain. He was at first inclined to do a radical operation followed by skin-grafting, but the question arose where to

get any nose skin for grafts. Skin from the thigh he did not think would answer. After removing a few more of the large masses with the knife, Dr. Piffard said he proposed to try and complete the cure by means of the constant (galvanic) current applied through the nose. The use of electrolysis he considered injudicious, because by that method we were not able to limit the destructive process, and it was very painful.

DR. FOX said he had treated two of these cases by means of electrolysis with very satisfactory results. The treatment was rather painful and certainly tedious, and should not be recommended in preference to the knife.

A Case of Anæsthetic Leprosy.—Presented by DR. HENRY H. MORTON (by invitation).

G. W. B., seven years old, born in St. Vincent, West Indies, and came to St. Catharines at the age of seventeen months, where he lived until three years ago, when he came to Brooklyn.

His parentage is mixed, being Spanish, Carib Indian, English, and negro.

The remainder of the family, consisting of father, mother, and two sisters, are healthy, and the mother states that none of the boy's relatives are lepers.

After the family had been here eighteen months the children were all taken sick with measles, and this boy after his recovery ran out into the snow and was soon attacked with pains in the joints and fever. Two or three weeks later an eruption of blisters accompanied by pain came out on the arms, and at the same time an eruption of vesicles appeared over a limited area on the back. The hands gradually grew progressively weaker.

Present Condition.—The boy is slightly built and rather thin. A few brownish spots are scattered over the face and arms, and over the right sacral region is a spot three inches in diameter of a dark-brown color at the margin, gradually fading to a dead white in the center. The center of this spot is insensitive to the prick of a pin.

The hands show the characteristic deformity of the "leper's claw," with the bending of the phalanges and the atrophy of the interossei.

The peroneal and ulnar nerves are thickened, and can be felt as large as a lead pencil under the finger.

A Case of Anæsthetic Leprosy.—Presented by DR. JAMES MCF. WINFIELD (by invitation).

The patient was a male, colored; aged eighteen years; born in St. Vincent, one of the Caribbean Islands. He lived for six years in the island of St. Kitts, and has been in the United States for seven years. His paternal great-grandfather was a Scotchman, great-grandmother a negro. His maternal great-grandfather was a Dane, great-grandmother a Caribbean Indian. So far as can be traced the family history is entirely free from any taint, such as syphilis, tuberculosis, or leprosy.

About five years ago the patient began to complain of lancinating pains in the arms and legs, more particularly on the right side. Some time previous to the advent of these pains the mother noticed a small circular patch over the right malar eminence. Spots of the same character were also observed on the buttocks. They so closely resembled ringworm that remedies were applied for this disease, but in spite of treatment they continued to enlarge and new ones formed over other parts of the body. The boy's general health began to decline. Although not sick, he is not as strong and vigorous as formerly, and appears listless and stupid. There is a large ulcer on the

right heel caused by chafing of the shoe. This injury was received over three years ago and has resisted all forms of treatment. The ulcerative process has extended so deeply as to expose the ligament covering the attachment of the tendo Achillis to the os calcis. Injuries of any kind received to the skin resist treatment. The arms, hands, and right leg present such changes as follow neuritis. There is atrophy of the interossei muscles and flattening of the thenar and hypothenar eminences. The deformity is progressive, producing more or less a claw hand. Both ulnar nerves feel cordlike, and there are a number of nodules along their course, particularly just above the olecranon. The skin over the legs and arms presents an ichthyotic appearance. All the light patches are anæsthetic except two recent ones on the thigh, which are decidedly hyperæsthetic.

DR. BULKLEY said he thought there was no question about the diagnosis in these two cases. Cases of leprosy have developed in this country. He had reported two or three cases which developed in patients who always lived in the vicinity of New York city and in whose family there were no other cases. As regards the contagious or noncontagious character of the disease, he is of the opinion that there is nothing in connection with it to which the name contagious could rightly be applied, and he would not place any restrictions upon these patients. He treats it as he would any other non-contagious disease. In Unna's hospital at Hamburg he himself slept in the same house with a leper for a week, and he has often observed Unna's own children playing in the sand with a leper boy who was there under treatment. He is not in favor of isolating these patients.

DR. SHERWELL said in common with others he had had a fair number of these cases under his care and has never in his or others' practices known of contagion. He did not isolate his cases in any way, the chances of such contagion being so infinitesimal as he believed. When we study the history of leprosy in this country we must reach the conclusion that it is not probable or even possible that the disease will become epidemic here or in any way general. Under favoring circumstances, as of climatic conditions, etc., it is, he believed, possibly contagious and probably inoculable.

As for the cases in immediate connection, he did not look upon isolation as at all a necessity, and in short considered that, with proper hygiene and medical treatment, more as a boon to the patient than a necessity for the general welfare.

DR. PIFFARD said he thought leprosy was contagious under certain conditions in countries where the habits of the people are different from those here. The tubercular form with open lesions he regarded as especially contagious.

DR. FOX said he recently saw the case of leprosy which was sent to the Riverside Hospital by the New York health authorities. Although he believes that leprosy is contagious, he does not think that such a case is of any more danger to the community than are the hundreds and thousands of cases of tuberculosis which are scattered throughout the city. Physicians should do their utmost to abate the insane fear of the public regarding the dangers of leprosy. If they can be put in a hospital and properly cared for, well and good, but to isolate them in a pest-house until they die is a crime. He hopes to see the time when some philanthropist will endow a hospital for the reception of these patients, where they can be properly treated and cured. He has had one case under his care for six or eight years which now scarcely presents a

trace of the disease. Dr. Fox said he is opposed to compulsory segregation. The absurd idea of comparing leprosy with smallpox and like diseases should be exploded. The disease will probably never gain a foothold in any civilized country.

DR. ALLEN said that, in discussing this question, we should confine ourselves to leprosy as it affected this country, and the possibility of making the United States leper-free. Dr. Fox says he is in favor of a leper hospital. If we were at all unanimous in our opinion, the Government would no doubt be willing to erect such a hospital; but there are so many conflicting views regarding the subject that we can not hope to have anything accomplished. The speaker said he did not see how any one could study the literature of this subject without reaching the conclusion that the disease is a communicable one. If proper means were adopted we could isolate the lepers now in this country and prevent others from coming. He is opposed to the treatment of lepers by the local boards of health, as is now being done. It is inhuman and a disgrace to civilization to send a leper to North Brother Island, and keep him isolated there until he dies, in the way a poor Chinaman was treated some years ago.

DR. PIFFARD said that fifteen or twenty years ago he placed himself on record as being in favor of the United States Government establishing a national lazaretto and enforcing segregation. He had not seen nor heard anything since on this subject to change his views. He had had many lepers under his observation for years, and had never seen an instance where the disease was communicated by them to others. He referred to a case of leprosy which was presented to the society many years ago by Dr. Bulkley, Sr.; that patient was born in this State, he had never lived anywhere else, and, so far as he knew, had never come in contact with the disease.

DR. BRONSON said that much harm is being done by the public agitation of this question. After we have learned how to segregate patients suffering from tuberculosis and syphilis, it will be time enough to talk about segregating lepers. Certainly the danger of contagion in leprosy is not imminent. We have had lepers in this city for many years, and yet there is not a single case on record where local contagion occurred. The soil here is evidently not favorable for its development, and there is certainly no danger of an epidemic.

DR. PIFFARD said he did not agree with the statement made by Dr. Bronson that it is unwise to segregate leprosy, while we leave syphilis and tuberculosis uncontrolled. An attempt to segregate the two latter diseases would be as futile as it would be to clean the Augean stables. We have much to learn about segregation, and it would be extremely wise to begin with a disease which is not very prevalent, and with which the plan can be carried out at moderate expense; the experience thus gained might aid us in handling other diseases later on.

DR. MORROW said he coincided in the general opinion that leprosy is a contagious disease. We know so little of the modes by which it is propagated and the degree or measure of its communicability that we can not speak with authority regarding it. In both the patients presented the disease is of the anæsthetic type, which is not so contagious as the tubercular. In certain countries, where the disease is of the anæsthetic type, as in Mexico, for instance, it does not spread; while in other countries, where the tu-

bercular type is more common, as in the Sandwich Islands, it spreads very rapidly. In the patient presented by Dr. Winfield the bacilli were not found in the plantar ulcer nor in any of the skin lesions. In such cases the pathogenic agent of the disease is practically nonexistent. He had never heard of any case of leprosy originating from the patients in the City Hospital, and yet we can not affirm that they do not exist, as the disease may take ten or more years before it develops sufficiently to be recognized. The statement made by one of the speakers that leprosy does not spread in this country is true of the northern part of the United States; it is true of Iowa and the Northwestern States, where the Norwegian lepers settled, but it is not true of the South. In New Orleans, for instance, over a hundred cases of leprosy have been observed, and probably sixty of these have never been outside the State of Louisiana. Patients suffering from the tubercular form of the disease should be segregated, and there ought to be a national hospital for the reception of these cases.

DR. PIFFARD said he agreed with Dr. Morrow that a distinction should be drawn between the tubercular and the anæsthetic forms of leprosy, as regards their contagious character. In the anæsthetic form, the noxious element of the disease expends its strength mainly on the nervous tissues, and the skin lesions are simply due to a loss of nutrition, and the bacilli are frequently absent. In the tubercular form the bacilli are found in the tissues. There is, however, no absolute difference between the two forms of the disease, and one may merge into the other.

DR. GEORGE T. ELLIOT said he passed two years of his life at the Charity Hospital in New Orleans, and during that period they had at least ten lepers there continually, who were kept in the same wards and had their meals at the same table with the other patients. Some of these lepers had been there for fourteen years, and there was no instance on record where they had transmitted the disease to any of the doctors or nurses. All the cases there came from a certain section of Louisiana, known as Arcadia, which is settled by a low class of French and people from the West Indies. During his entire term of service there he never heard of a single case where the disease was communicated to others by any of these patients.

DR. MORROW said that while in New Orleans he heard on good authority that a priest had contracted the disease while ministering to the lepers. As regards the nationality of the lepers in New Orleans, some of them are Germans and a large proportion are Americans. Leprosy in one respect is similar to tuberculosis, in that certain climatic or other influences are necessary for its development.

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

NINTH ANNUAL MEETING, HELD AT THE CLIFTON HOUSE, NIAGARA FALLS,
ON MAY 28 AND 29, 1895.

FIRST DAY, TUESDAY, MAY 28TH.

DR. L. BOLTON BANGS, *President, in the Chair.*

(CONTINUED FROM PAGE 360.)

Treatment of Stricture of the Deep Urethra.—DR. PAUL THORNDIKE, of Boston, read a paper on this subject. He stated that, whatever may be our belief as to the curability of organic stricture of the male urethra, and whatever may be our prejudice for or against the operation of divulsion in any of its forms, or of internal urethrotomy, as applied to stricture of the deep urethra, it is probably true that the bulk of surgical opinion to-day is in favor of cutting from without such cases of stricture of the deep urethra as can not be properly cared for by careful and gradual dilatation with graduated instruments. A very large percentage of cases of deep stricture need operative interference of a kind more immediately efficacious than that which can be given by any form of gradual dilatation. Very many of these cases need a cutting operation from without.

An external urethrotomy, properly performed, not only drains the bladder, but also attempts to cure or improve the strictured area itself by dividing the stricture. To accomplish this end the operation is always one of exactness and precision, and frequently one of great technical difficulty. The method of procedure which Dr. Thorndike stated he usually employs in these cases is to first perform an internal urethrotomy with the Maisonneuve instrument, and at once follow it by an external perineal urethrotomy. A filiform bougie is passed through the stricture, the Maisonneuve guide screwed on, and the stricture cut with the knife in the usual way. Then the instrument is removed and a grooved staff can be easily introduced, and the perineal opening made with ease and precision. If the groove for the knife be made on the convex surface of the Maisonneuve guide instead of on its concavity, as is usual, the cut will be made on the floor of the urethra and obviate the necessity of cutting on both floor and roof, as is necessary with the ordinary Maisonneuve instrument.

The author stated that the great stumbling-blocks in the way of a wide use of internal cutting operations in deep strictures are hæmorrhage and sepsis : the combined operation has frequently been suggested as a means of doing away with these risks. The operation above outlined can be done in all cases where the introduction of a filiform bougie is possible.

DR. PALMER said he was still rebellious against the external operation in deep urethral stricture. At the Altoona meeting, several years ago, he reported twenty-three cases of internal urethrotomy, and since then he had seen nothing to induce him to change his method of treatment. He employs the Maisonneuve instrument with a moderate-sized blade, and then introduces Banks's dilating filiform bougies until a good-sized canal is produced. The

speaker expressed the opinion that the dangers incident to deep urethrotomy without an external opening have been exaggerated. Careful asepsis is of course necessary, and the urine should not be allowed to pass over the divided stricture for several days. Hæmorrhage is sometimes quite severe, but he has never had much difficulty in controlling it.

DR. W. K. OTIS said that with the Maisonneuve instrument, which cuts upon the under surface of the urethra, there is danger of extravasation of urine. The knife of the instrument cuts not only at the point of stricture, but all the way down the urethra. The speaker said he did not agree with the statement made by Dr. Palmer that the dangers of internal urethrotomy have been exaggerated. In one instance coming under his observation, an almost fatal hæmorrhage followed the operation, and he no longer employs it for strictures below five and a half inches. With a perineal opening the hæmorrhage can be easily controlled.

DR. J. WILLIAM WHITE expressed the opinion that a distinction should be made between the terms external perineal urethrotomy and perineal section. The latter should be confined to those cases where we can not get a guide into the bladder through the urethra.

DR. BRYSON said we should make a distinction between the inflammatory and cicatricial forms of stricture. The former is one which is still covered by some mucous membrane, whereas the cicatricial stricture, which has as a sub-variety the traumatic stricture, is not covered by any mucous membrane whatever.

DR. BELL said that in one case, in which he employed the Maisonneuve knife, the patient died shortly afterward from some other disease, and an examination of the urethra showed no evidence of cutting, excepting in that portion which was narrowed by the stricture.

DR. OTIS said he had made a number of experiments on the cadaver, and has seen some autopsies which clearly showed that on some occasions the Maisonneuve knife cut the vault of the urethra at points anterior to the stricture.

A Case of Cancer of the Urethra.—By DR. ARTHUR T. CABOT, of Boston. The patient was an elderly man who entered the hospital March 29, 1895. Thirty-five years ago he had gonorrhœa, from which he entirely recovered. Nine years ago an abscess formed in the perinæum, through which, however, no urine passed. About a year ago he began to have some difficulty in passing water. He did not, however, have complete retention, and his condition improved somewhat under medical treatment. Nine weeks before he entered the hospital a swelling appeared in the perinæum which was painful and confined him to bed. At the end of a fortnight it was lanced, and pus was evacuated from it. A week later the urine began to come through the opening. After a brief period of comparative comfort the swelling began to spread and less and less urine passed through the natural passage until all of it came through the fistulæ. Examination showed the perinæum to be occupied by an indurated mass extending forward beneath the scrotum with two fistulous openings over it. The urethra was impervious to instruments, even of the smallest size, all of them being arrested at about the peno-scrotal angle.

On April 1st the perinæum was widely laid open, considerable pus being evacuated from various side pockets. The walls of the abscess were in such a sloughy condition that nothing unusual was noticed at that time in the

character of the case. The greater part of the induration cleared up in a few days, but there still remained a hard, sloughing mass at the bottom of the cavity about the urethra. Ether was again administered on April 15, 1895, and a careful examination showed this hard tissue to be distinctly of the character of a neoplasm. It extended forward to the peno-scrotal angle and backward to just anterior to the triangular ligament. The prostate was slightly enlarged, but not more than is usual in a man of his age. Under the microscope the tumor proved to be a cancer, of which the cells were small and cylindrical in character. Its origin, from the urethral mucous membrane or from some of the glands associated with it, was made clear by the anatomical relations found at the operation. The tumor was separated by a wide interval from the skin, and did not extend in either direction beyond the perineal portion of the urethra. As regards treatment, the case came under observation too late to admit of any possibility of eradicating the tumor by operation. The only further treatment was directed to keeping the urine in a bland and unirritating state and to diminishing the discomforts of the sloughing mass in the perinæum by the use of antiseptic applications. After concluding the history of the above case, Dr. Cabot stated that he had been able to find but five recorded cases of urethral carcinoma.

DR. FULLER said he reported a case of cancer of the urethra some months ago. He was unable to secure an autopsy, and could not say positively where the disease began.

DR. BRYSON said he had seen two cases where the disease evidently began in the fossa navicularis. In one the diagnosis of cancer was not certain.

DR. W. K. OTIS exhibited the model of an instrument, which consisted essentially of a small telescope attached to the urethroscope. By means of this instrument the urethroscopic field is enlarged, and a better view obtained.

DR. BRANSFORD LEWIS exhibited a circumcision tractor and clamp, and described his method of performing the operation.

DR. W. F. GLENN exhibited an instrument, consisting of a small roller attached to a handle, which he devised for the purpose of milking the prostate and seminal vesicles. He also exhibited a circumcision forceps.

A Case of Traumatic Rupture of the Urethra; Restoration after Thirty-six Years.—Reported by DR. GEORGE CHISHMORE, of San Francisco. The patient was a man, aged forty-two years, a brewer by occupation. At the age of six years, in order to avoid constantly wetting the bed at night, for which he had often been punished, he tied a string about the penis near the scrotum. The constriction thus produced entirely severed the urethra and corpus spongiosum and divided fully one half of the corpora cavernosa, so that on bending the penis upward the severed ends of the urethra were over an inch apart. Two attempts were made in Germany to restore the urethra by plastic operations, but both failed. Several months ago he came under Dr. Chishmore's observation, who first made a perineal section, through which the urine was allowed to pass, and then denuded the tissues of the old wound, precisely as is done in attempting to close an old torn perinæum. The two ends of the urethra were cut off squarely, a staff introduced, and then the severed portions of the corpora cavernosa were closely drawn together by means of a deep line of buried catgut sutures. Accurate approximation of the under surface of the urethra was obtained by these catgut sutures; no attempt was made to suture the upper or deeper half of the urethra, owing to

the difficulty of accurately adjusting the stitches. The corpus spongiosum was carefully sutured, and the integument then brought together.

On the second day after the operation the man had an attack of delirium tremens. On the thirteenth day the catheter was removed, and the perineal incision permitted to close. The man now passes his urine entirely through the normal urethra, the severed ends of which have united so closely that the introduction of a bulbous sound fails to reveal the line of union. Since the operation the man has had two erections without pain.

In connection with the above case, Dr. Chismore exhibited a number of photographs to illustrate the technique of the operation.

The following officers were elected for the ensuing year: President, Dr. Claudius H. Mastin, of Mobile, Ala.; vice-president, Dr. Francis S. Watson, of Boston; secretary, Dr. W. K. Otis, of New York.

It was decided to hold the next meeting of the association at Atlantic City, N. J.

Correspondence.

A DEVICE TO FACILITATE THE INTRODUCTION OF FILIFORM BOUGIES.

The following method of introducing a filiform bougie is simple and effectual, even in the most obstinate cases, where the canal is small and tortuous, or inclined to spasm:

Take a Kiefer nozzle and stretch over the bulb a piece of sheet rubber (the same as dentists use for dams) and fix it firmly with a few turns of strong thread. Puncture the rubber into each hole with a sharp-pointed pin.

Pass a filiform bougie through one prong of the nozzle and let the end extend half an inch through the rubber. To the other prong attach the tube of a fountain syringe. Charge the bag with hot water and suspend ten feet, according to the technique of Prof. Janet, of Paris, for treating gonorrhœa.

Insert the rubber-tipped nozzle firmly into the meatus and balloon the urethra with hot water.

The rubber hugs the bougie closely and prevents reflux of the water, while the hydraulic pressure forcibly distends the urethra and drives the water through the stricture, thus causing it to be dilated and straightened, when the bougie can be passed through safely and easily.

There is much resistance on the part of the urethra at first, which usually yields to a little patient care and intelligent manipulation.

W. F. ROCHELLE.

Jackson, Tenn., July 2, 1895.

DRAINAGE AFTER PROSTATECTOMY.

Editor JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES :

DEAR SIR: Permit me to express my thanks to you for your courteous insertion of my letter in your last number (August), and to Dr. Fuller, for his very prompt letter in reply, in the same number, correcting his unintentional misquotation of the description of my method of prostatectomy published in the *Lancet* of April 14, 1894.

In his reply Dr. Fuller gives expression to several opinions on points on which he has evidently arrived at conclusions diametrically opposite to those formed by myself. Dr. Fuller may prove right and I wrong, but in the meantime, as Dr. Fuller has introduced them, will you allow me briefly to refer to them?

(a) Dr. Fuller does not think the presence of a perineal tube delays convalescence.

My impression is that I have repeatedly seen the tube, by keeping feeble old men on their backs, materially delay convalescence, and even fatally turn the scale in critical cases by inducing pulmonary hypostatic congestion and cerebral cedema.

(b) Dr. Fuller thinks that urine in contact with the perineal wound is not to be dreaded, "since dependent and thorough drainage of that part can be attained."

I am unable to understand how such drainage is to be secured. As I pointed out in first publishing my operation, the patient lies horizontal, usually on his back. Along the perineal tube urine flows from bladder to exterior, but *alongside* the tube escapes a certain amount of urine from the bladder. This gravitates into the cavity from which the body and lobes of the prostate have been removed, which cavity lies on the front of the rectum, in the hollow of the sacral curve, and has neither dependent nor other drainage, being in the recumbent posture of the patient below the level of both the perineal tube and the perineal wound.

(c) Dr. Fuller says, "The suprapubic wound is more apt to delay convalescence in these cases than the perineal one."

My experience of a considerable number of operations involving opening of the bladder has been that troublesome or permanent fistulæ rarely result from suprapubic cystotomy, and by no means uncommonly from perineal cystotomy.

(d) Dr. Fuller is of opinion that perineal drainage is essential to success.

I, on the other hand, specially desire to avoid the exit of any urine by the perineal wound. I find in most cases no difficulty in draining the bladder either by the suprapubic wound or by a large catheter tied in *per urethram*. (The enlarged prostate having been removed, the catheter occupies a low-level route from the urethra to the base of what was prior to the operation the post-prostatic pouch.) In those cases in which this method of draining proves too irksome to the patient to be long tolerated I persevere with it for three days, and *after* that time open the base of the bladder and insert a perineal tube. By that time the cavity of the extravasical perineal wound left by the removal of the prostate has become protected by a covering of granulations, and is there-

fore little liable to septic absorption from the cystitic urine. Such a procedure as Dr. Fuller advocates, viz., the admission of septic urine to the undrained and undrainable cavity of the perineal wound when that cavity is *fresh* (that is, unprotected by granulations), seems to me unsurgical and calculated to result in the septicæmia I have seen follow it both in my own hands and in those of others.

Yours faithfully,

JAMES H. NICOLL.

Glasgow, August 28, 1895.

Book Reviews.

Therapeutic Suggestion in Psychopathia Sexualis. By Dr. A. VON SCHRENCK-NOTZING. Translated from the German by CHARLES GILBERT CHADDOCK, M. D., of St. Louis. Philadelphia: The F. A. Davis Company, Publishers.

This work deals largely with the same questions as does von Krafft-Ebing's *Psychopathia Sexualis*, though from a somewhat different psychological standpoint. Considerable space is given to the consideration of the pathology of sexual disorders and perversions—wholly, however, from a psychological point of view, no mention being made of the possibility of lesions in connection with the sexual organs accounting for the symptoms displayed in some of these cases. The various sexual disturbances are classified largely apparently according to the symptoms presented and a trial made by means of hypnotic suggestion to cure these symptoms by proper mental guidance. In a certain percentage of these cases this form of treatment is shown to be of positive value. Such cases must of course be representative of perverse mental states, since it is evident that no pathological condition situated in the sexual organs would be cured by hypnotism. To the objection which has been made to Krafft-Ebing's book, and which would naturally apply also to this one—namely, that the general public, prompted by morbid curiosity, form the great bulk of the readers, and that consequently the publication in detail of these cases does more harm than good—the author in his preface states: "To be sure, the appearance of seven editions of the book" (Krafft-Ebing's) "could not be accounted for were its circulation confined to scientific circles. Therefore it is not to be denied that a pornographic interest on the part of the public is accountable for a part of its wide circulation. But, in spite of this disadvantage, the injury done by implanting knowledge of sexual pathology in unqualified individuals is not to be compared with the good accomplished."

EUGENE FULLER.

Klinische Vorlesungen über Syphilis. By Dr. E. VON DÜRING. Hamburg and Leipzig: Leopold Voss, 1895. Pp. 320. Price, 6 marks.

This book, while not claiming to exhaust the subject of which it treats, is an excellent presentation of the present knowledge of syphilis. As its title indicates, we have here to do with a series of lectures. They were delivered

in the Imperial Medical School of Constantinople, in which the distinguished author is the Professor of Dermatology and Syphilis. Originally given in French, they are now published both in German and in Turkish. Their having been given in French accounts for the clearness and directness of the German of this translation. The book seems to us to be a safe guide to the student as well as the graduate in medicine, embodying as it does the opinions of a practical observer unobscured by theory. It is furnished with a full table of contents and a good index.

The first line of the book is rather startling: "Syphilis is apparently as old as the human race." This view is contrary to what is usually held, but as it is quite unessential we can let it pass. Our author feels confident that a parasite will some time be found as the cause of syphilis. He speaks decidedly against the excision of the initial lesion, holding that it is but the expression of a general infection which already has taken place by way of the blood-vessels. The general adenitis is held to be secondary to the blood infection. Most of the moot points in regard to the disease are discussed with clearness and understanding. The description of the various eruptions is well done and more pains are taken with their differential diagnosis than is usual. Affections of the bones, nerves, eye, and viscera are treated of at length. Thirty-seven pages are devoted to the treatment of syphilis. The preferred method of the earlier stages is by mercurial inunctions. The final chapters deal with such practical questions as when the treatment shall be begun and ended and when the syphilitic shall be permitted to marry. Stress is well laid upon the importance of caring as well for the individual as for his syphilis, and we are cautioned against too fast rules in the management of the cases as they arise. The reading of the book leaves one with the impression of a conscientious piece of work well done.

G. T. J.

Lehrbuch der Haut- und Geschlechtskrankheiten für Aertze und Studierende. By Dr. MAX JOSEPH. Erste Theil: Hautkrankheiten. Zweite vermehrte Auflage. Leipzig: G. Thieme, 1895. Pp. 319. Thirty-six Illustrations and three Photogravures. Price, 6 marks.

When a book comes to us bearing upon its cover the legend "second enlarged edition," and when we find that the first edition appeared only three years before, we look at it with respect; but we must bear in mind that the words are not so pregnant with meaning when they stand upon the title-page of a German book as when they occupy the same position in an English or American book. This is because it is the custom in Germany to print much smaller editions than in the other mentioned countries. Nevertheless, we congratulate our author upon the appearance of the second edition of his book so soon after the first edition.

Dr. Joseph came into prominence some nine years ago on account of his experimental work in the study of alopecia areata. His experiments did much to strengthen the position of those who held the neurotic theory of the disease. The book now before us seems to have been written at the demand of the publisher for a book on skin diseases, and the author has felt himself hampered by the publisher's limitations as to the number of pages he should write. This he confesses in the preface to the second edition. Under these circumstances we can not expect any man to do himself justice and produce a

first-class book. We have looked over the book with a good deal of care. Its strongest parts are those on treatment. These show evidences of being the results of the author's own experience and are quite full as to the main diseases. The rest of the work seems to us to be as well done as we can expect in a condensed treatise. References are given in a most unsatisfactory way, the authority's name only being mentioned without the slightest clew to where the reference can be found. It seems to us better to omit names of authors if we do not give proper references. In a list of four pages of authors' names we find but six names of Americans; the rest are nearly all those of Germans. On the whole the book reminds us of an eighteen-year-old youth—a hobbledehoy, neither a man nor a boy. It is too large for a manual; too meager for a complete treatise. It is one that should be in the hands of the author's students, but not necessary for the specialist's library.

G. T. J.

Practical Urinalysis and Urinary Diagnosis. By CHARLES W. PURDY, M. D., of Chicago. Philadelphia: The F. A. Davis Company, Publishers.

This work of three hundred and fifty pages consists of two parts, namely, Analysis of Urine and Urinary Diagnosis, together with an appendix devoted to examination of urine for life insurance. The writer has considered the subject from a medical as well as from a surgical point of view. Much useful information can be derived from reading this volume, though from its limited size considerable condensation has been necessary. It is to be regretted that more space could not have been given to urinary bacteriology, especially for the benefit of surgical readers.

The second part of the book is destined to be very useful in teaching its readers to draw inferences from what the urinalysis has shown to exist. The last section of this portion of the book treats of the changes which take place in the urine during the course of numerous diseases not directly related to the urinary organs. At the present time it is a fault with many practitioners to examine the urine of only such patients as exhibit symptoms directly referable to the urinary organs. A work like this of Dr. Purdy's, by showing the great importance of the study of the urine, will tend to correct this evil.

EUGENE FULLER.

Selections.

Balanoposthitis and Chancroid treated by Nosophen.—SEIFERT, of Würzburg (*Wiener klinische Wochenschrift*, No. 12, 1895) directs the use of this remedy in balanoposthitis as follows: Clean the preputial cavity thoroughly, cover the glans and the mucous surface of the prepuce with a thin layer of nosophen, and place a very thin layer of absorbent cotton between them. Renew the dressing every twenty-four hours. Within three days he thus obtains epithelial covering of erosions and complete drying of the preputial cavity.

He also used it in five cases of soft chancre. After cleaning the ulcer, he cauterizes its base with liquor ferri, strews nosophen upon it, and covers all with a thin layer of cotton.

Nosophen is a yellowish powder resulting from the action of iodine upon phenolphthalein, containing about sixty per cent of iodine. It is odorless, soluble with great difficulty, easily pulverized, and exercises most surprising siccative action.

[The reviewer has had frequent occasion to use nosophen, which was introduced by Walter Löb, of Aix-la-Chapelle. Ernst R. W. Frank brought it into use in Posner's and Wossidlo's Genito-urinary "Polikliniken" in Berlin. An extensive peri-urethral abscess opened by Arthur Lewin was strewn with nosophen (then called iodophen) and healed completely in twenty-four hours. Extensive chancroids of the labia majora were strewn with nosophen and healed in five days. Ernst S. Feibes, of Aix-la-Chapelle, told the reviewer of numerous similar results in his large genito-urinary practice.

The bactericide action of nosophen is shown in cystitis. Washing the bladder with a four-per-cent solution clears the urine in a few days, facilitating such further treatment as each individual case may require.]

FERD. C. VALENTINE.

Gonorrhœa, Treatment of.—BUIARD, of Paris (*Pester medicinisch-chirurgische Presse*, No. 14, 1895), divides the treatment of gonorrhœa into, first, the old "methodical" treatment, and second, copious irrigations with permanganate of potassium.

He urges mild antiphlogistic treatment during the first stages of the inflammation. To this end protracted lukewarm baths and emollient, alkaline drinks are given, such as

℞ Natrii bicarb. 40·0;
Natrii salicyl. 10·0.

One to two teaspoonfuls to a litre of lemonade, of which a litre to a litre and a half are drunk daily.

To avoid pain on micturition, he advises placing the penis in a vessel containing cold water. (Reviewer has found warm or even hot water more efficacious.)

Nocturnal erections he treats with

℞ Antipyrini. 1·5 to 2·0;
Tinct. opii. gtt. xv to xx;
Aquæ 40·0.

As a rectal injection before retiring.

Or suppositories consisting of

℞ Morphini hydrochlor. 0·008 to 0·01;
Extr. opii. 0·3 to 0·5;
Extr. belladonnæ 0·2;
Butyr. cacao. 2·50.

After the primary inflammatory manifestations have ceased, remedies are used to check the process. First among these are the balsams:

Balsam of copaiva, 8·0 to 12·0; sodium copaivate, 4·0 to 6·0, or extr. cubeb or ol. santali, 2·0 to 6·0, daily. Should diarrhœa obtain during the use of the balsams, tr. laudani, ten drops twice daily, are given.

The author uses as injections:

Kali permang., 0·2 to 0·25 per cent; argent. nitric., 0·1 to 0·2 per cent;

corrosive sublimate, 0.05 per cent. He employs potassium permanganate while gonococci are still present; when they have disappeared, he uses silver nitrate or corrosive sublimate.

As instillations with the Guyon syringe he employs either a syringe of a two-per-cent silver-nitrate solution or thirty to forty drops of a two-per-cent solution.

As irrigations he uses weaker solutions of potassium permanganate than those employed by Janet—viz., 1 to 10,000 to 1 to 5,000.

FERD. C. VALENTINE.

Epididymitis, etc., treated by Vasogen Iodide.—LEISTIKOW (*Monatshefte für praktische Dermatologie*, vol. ix, No. 10) used six per cent vasogen iodide in fifty patients with epididymitis, incipient and purulent inguinal lymphadenitis, specific pharyngitis and secondary angina, specific ulcer cruris, periostitis of the nasal bones, scrophuloderma of the cervical and inferior maxillary regions, complicated with an immense lupus of the nose and both cheeks. He found that vasogen iodide possesses decided advantages over other iodine preparations. In no case did he observe iodine dermatitis.

The vasogens (oxygenated vaselines) are hydrocarbons impregnated with oxygen, which prove solvents for many drugs. Their emulsibility contributes to the quick absorption of the medicaments they carry. Dahmen and Bayer tested the vasogens bacteriologically and therapeutically and approved them.

Vasogen iodide evaporates with extraordinary rapidity, as is shown by the disappearance of the iodine stains shortly after inunction. Its marked effect upon the deeper tissues, as in chronic, hard, epididymitic infiltrations, suggests that a considerable quantity of the iodine has exercised its influence.

Leistikow gives the following indications for the use of vasogen iodide: 1. Acute and chronic blennorrhoeic epididymitis; 2, incipient inguinal adhesions in consequence of soft chancre; 3, tentatively in all glandular swellings; 4, syphilitic and tubercular affections of the skin and mucous membranes.

FERD. C. VALENTINE.

Neuroses of Fear from Disturbed Sexual Function.—FREUD (*Neurologisches Centralblatt*, No. 2, 1895) endeavors to separate from neurasthenia a definite collection of symptoms which he groups as "*Angstneurose*" and considers as always caused by disturbances of sexual life. These symptoms are—*a*, general irritability, especially auditory hyperæsthesia, often leading to insomnia; *b*, anxious expectations, hypochondria, dread of conscience, mania of doubt; *c*, attacks of fear or their rudiments, cardiac palpitations, arhythmia, nervous dyspnoea, sudden perspiration, occasional tremblings, attacks of bulimia, diarrhoea, vertigo, local congestions, pavor nocturnus, even syncope.

The chronic fear, together with the tendency to vertigo, develop two groups of typical phobias (primordial deliria), as dread of serpents, tempests, and similar phobias, or agoraphobia and allied fears.

The author attributes these conditions principally to intentional sexual abstinence, frustrated attempts at coitus, and coitus interruptus reservatus.

Freud conceives the following as an explanation: The seminal vesicles being filled to a certain degree, their contents press upon the nerve terminals

of their walls ; when this pressure has become great enough to overcome the normal resistance, it is communicated to the brain cortex and manifests itself in psychical irritation. Then the group of psychic sexual conceptions become active, requiring adequate action for their discharge—i. e., the complex reflex spinal act, with all the psychical preparations necessary for the relief of this reflex. If adequate action then be substituted by an inadequate one, as masturbation, neurasthenia results. If abstinence be persisted in, the somatic sexual excitement is no longer cortical *in libido*, but becomes subcortical in fear. The same obtains when the psychic impress is misdirected by coitus reservatus.

When Freud's neurosis of fear results upon prolonged illness or over-exertion, the psychic impulse has grown insufficient for the task always before it.

The neurosis of fear is added to neurasthenia or hysteria when a masturbator marries and abstains, or if a hysterical woman takes up coitus reservatus.

If a woman habitually practices preventive intercourse, she is easily prone to become a masturbator or falls in love with another man, and acquires hysteria in addition to her primary neurosis of fear.

[*Reviewer's Note.*—The immense number of perfectly healthy people who all their lives practice preventive sexual intercourse seems to negate Freud's assertion so far as they are concerned. In general experience very few masturbators abstain from sexual intercourse after marriage.

If the author's theory that preventive intercourse can lead women to uncontrollable adultery were to obtain, the work of the divorce courts would necessarily cease, for then every faithless woman would have her exculpation in the mere assertion.]

FERD. C. VALENTINE.

Dislocation of the Penis.—PRJASCHNIKOW (*Russisches Centralblatt für Chirurgie*, No. 9, 1895) reports a patient aged nineteen whom a cow had "butted" in the genital region seven years before. He experienced no special pain at the time, but the penis disappeared, leaving only a small opening in the skin through which the patient could urinate at will. Efforts made at the time to restore the normal state proved unavailing. Prjaschnikow found the penis in the scrotum, between the testicles, which presented no abnormality. A sound passed through the orifice in the skin passed downward six to seven centimetres through a canal. By means of an incision through the skin downward from the opening the penis was liberated and found to be partly denuded of integument. The missing covering was replaced by a rectangular flap, whose source the author does not mention. A slight necrosis of the flap was the only defective point in the success which followed the operation.

FERD. C. VALENTINE.

Urinary Disturbances attributed to Diphtheria Serum.—KARLINCKI (*Wiener medicinische Wochenschrift*, No. 8, 1895) injected the Behring-Roux serum into himself with the following results, as far as urinary disturbances are concerned :

Ten cubic centimetres produced no change in the normal constituents ; albumin and sugar were not present.

In the three tests made, an increase of urea, uric acid, and kreatinin set in

on the third day after the injection. This increase, however, remained within normal limits. Karlinski is of the opinion that the albuminuria occasionally observed after use of the serum is due to the disease and not to the serum.

FERD. C. VALENTINE.

Physiological Impermeability of the Healthy Vesical Epithelium. BOYER and GUINARD (*Archives de méd. expérimentale et d'anat. path.*, t. vi, No. 6, p. 883, 1894).

Bazy and Sabatier have recently claimed that the bladder absorbs quite as rapidly as the superior portion of the digestive tract, and Tricemi has gone so far as to state that the subcutaneous connective tissue often does not imbibe so quickly. To controvert these assertions, at such variance with theories drawn from the physiological functions and histological character of its lining (pavement epithelium), the investigations which form the subject of this paper were undertaken.

In one series of experiments, five in number, made upon dogs, the abdominal cavity was opened, the ureters and urethra tied, and a considerable dose of a powerful poison (chloralhydrate or arseniate of strychnine) injected through the bladder walls by a fine cannula. The poison was retained an average of four hours (in one case seven) without the slightest perceptible symptom appearing, except in one instance where the animal died after two hours and a quarter. The dose varied from four to ten centigrammes. The animal which died received the highest dose. One half the smallest amount, subcutaneously, sufficed to determine death in the subject. In order to preserve, as far as possible, natural conditions, not to wound the lining epithelium, not to use solutions of great concentration or to inject them in quantity, and, finally, to guard against penetration of the urethral canal, a second series of experiments were undertaken, sixteen in all. Cocaine, morphine, pilocarpine, atropine, eserine, veratrine, and strychnine were used in doses of five to ten centigrammes, injected through a catheter into the bladder, which contained a little urine, left after a spontaneous voiding. The instrument was withdrawn and the animal placed on the ground. Some of them retained the poisoned urine from ten to twenty-one hours—until micturition became necessary—without presenting the least sign of intoxication. A small portion of the urine, injected under the skin of the subject from which it came or of other animals, proved fatal shortly. The authors, in view of these results, believe themselves justified in the assertion that "the vesical epithelium does not absorb, or absorbs only very slowly, and in such a way that the results of this absorption will be normally inappreciable."

In the last division of the paper they attempt to explain the diametrically opposite results obtained by Bazy and his pupil Sabatier. The solutions used by the latter were of a much greater degree of concentration (e. g., strychnine, $\frac{1}{80}$; brucine, $\frac{1}{15}$, etc., while the authors' were 1 or 2 to 100), and they were introduced in large doses into a bladder previously emptied by the catheter. They were consequently placed in immediate and direct contact with the mucous membrane. Several of these bladders were examined histologically, with an almost constant finding of vascular modification and, taking this with Cazeneuve's statement that a toxic substance introduced in the bladder may modify the physiological state of its mucous membrane to the point of abro-

gating its function, and the possibility of urethral absorption not guarded against, they appear to prove a clear case. Guyon has recently (1892) sustained their position.

J. C. J.

Optic Neuritis of Blennorrhagic Origin. PROF. PANAS (*La Presse médicale*, February 23, 1895, p. 65).

The patient, a young man, aged twenty-six, with no family or previous personal history of interest or bearing on his condition, had suffered from chronic gonorrhœa for several years past. The disease from time to time underwent its usual exacerbations. About a year since, violent pain situated deeply in the lumbo-sacral regions, radiating to the lower limbs, appeared. It was acute enough to wake him from sleep several times during the night. During the attacks there were vesical pains, frequent desire to urinate, painful micturition accompanied by spasm of the neck and emission of turbid ammoniacal urine. A marked genital depression was noted.

The left eye revealed no anomaly; the right was amblyopic. Its visual field was narrowed concentrically and it presented besides a true scotoma at the inferior, internal part. The chromatic sense was as perfect as the feeble vision permitted. The pupil reacted to light and accommodation normally. The ophthalmoscope revealed a simple papillo-neuritis in the inverted image. The papilla showed ill-defined borders and numerous capillary vessels traversing it. In the right image were distinguished the papilla, slightly projecting, and a vitreous filled with a fine dust which obscured the fundus. This latter was probably due to a slight choroiditis. On the left side the eye was the seat of a lesion similar to that of the right, but less intense, showing a slight nebulosity of the papilla with turgescence of its veins. The patient complained of no trouble here, a not uncommon condition.

In the real image, the ophthalmoscope showed a papillo-retinitis on the right side which rendered the eye amblyopic; on the left, a condition which presaged a possible like development in the opposite eye. The diagnosis was optic neuritis of the whole tract of the nerve from the nuclei to the optic foramen. The origin of the neuritis should be sought in the cord.

Five years ago the author observed a similar case of blennorrhagic optic neuritis due to meningitis of the base. The author thinks that the gonorrhœal infection is localized in the lower extremity of the spinal cord and reacts on the sciatic and on the right optic nerve. It is not propagated by continuity in the latter case, but the disease is due to an independent localization, under the influence of the same toxic agent.

J. C. J.

The Histology of Epidemic Dermatitis. EMILIO ESCHEVERRIA (*Brit. Journ. of Derm.*, vol. vii, No. 1, 1895).

Sections taken from two of Savill's cases in the London epidemic of 1891 were stained with the new methylene-blue-orcein, hæmatoxylin-orcein, and carmine-gentian-iodide methods for the cell bodies, elastin, etc., but, as the nuclei were not clearly brought out, the methylene-blue-acid fuchsin and watery-blue-safranin stains were employed in addition. The technique of all these procedures is given in full, and will be of great value to American dermatopathologists not already familiar with them and their beautiful pictures.

The conclusions which a study of the sections gives are these:

I. Epidemic dermatitis, while it resembles chronic eczema in certain respects—viz., its superficiality, the surface scaling, prickle cell layer hypertrophy, loss of keratohyalin, infiltration of the cutis—still the differences are much more marked. (1) In epidemic disease the rete pegs are narrow, the papillæ wide, an opposite condition existing in eczema. (2) In both, the granular layer disappears, but in the first a new, clear layer extends over the prickle cells, while in the second they merge gradually into the horny cells. (3) In eczema, the protoplasm of the prickle cells is enlarged throughout the whole layer; in epidemic disease there is no increase in size in the lower strata. (4) The greatest change in Savill's disease takes place in the nuclei of the prickle cells, "the pathognomonic histological sign" of the affection. Their appearance varies according to their situation in the layer: in the lower strata they are generally hypertrophied and irregular, more or less spindle-shaped from pressure; in the upper strata they appear shrunken and surrounded, to their former limits, by a space filled with a solid translucent mass which stains with difficulty. The degeneration of the nuclei begins in the upper strata at the outer border of each nuclear body and changes the peripheral zone into a homogeneous mass. Processes radiate from the undegenerated remains of the nuclei outward. The author believes this to be a new and specific nuclear degeneration which he proposes to call "peridiaphania." (5) The coil-glands show degenerative processes in epidemic disease, a condition not found in eczema. (6) Leucocytosis appears to play no part in the epidemic affection; in eczema it exists particularly in the papillary body.

II. Epidemic dermatitis belongs, with chronic eczema, to the inflammatory diseases of the skin attended by epidermic hypertrophy and scaling and superficial infiltration of the cutis (i. e., to the catarrhs), and, among them, to the parakeratoses. Loss of keratohyalin is common to both.

III. Epidemic dermatitis differs from chronic eczema besides in the minor features mentioned, particularly by a new peridiaphanic degeneration of the nuclei of the prickle cell layer.

J. C. J.

Ein neues Verfahren der Gonococcenfärbung (A New Method of Staining Gonococci). Von Dr. ALFRED LANZ in Moskau (*Deutsche med. Wochenschrift*, 1894, No. 9).

The old methods of staining for gonococci are, according to the author, not sufficient in chronic cases with little secretion. The microbes are either not stained enough, or the difference in the color of the gonococci and the cells is not distinct enough.

The new method is as follows: The cover-glass on which the pus is spread and fixed is put into a twenty-per-cent watery solution of trichloroacetic acid for half a minute to a minute; the superfluous acid is then washed off with water. The cover-glass is to be dried with blotting paper and to be put through the flame, then placed in the following solution, the charged part downward: To thirty cubic centimetres of distilled water are added one or two drops of a five-per-cent solution of caustic potash and enough of a saturated alcoholic solution of methyl blue to make a dark-blue solution. The specimen is left in the solution for from two to five minutes, washed off with water, dried, and examined in Canada balsam.

G.

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Original Communications.

REPORT OF A CASE OF URTICARIA PIGMENTOSA OF OVER TWENTY YEARS' DURATION.*

BY PRINCE A. MORROW, M.D.,
New York.

THE case which forms the subject of this paper first came under my observation in July, 1876, and was presented before the New York Dermatological Society at the October meeting of the same year. Aside from the fact that this was the first case of urticaria pigmentosa recognized in this country, and the third or fourth recorded in medical literature, it possesses a special interest from the prolonged period during which it has been under observation, and the opportunity thus afforded of studying the natural history of a disease abandoned to its own evolution, and practically uninfluenced by treatment.

A careful observation of the clinical course of the cases of urticaria pigmentosa hitherto recorded would seem to show that it is essentially a disease of infantile life, due probably to some congenital predisposition, which shows a spontaneous tendency to disappearance toward the eighth or ninth year, and almost certainly before the period of puberty. In my case the duration of the eruption has surpassed these limits, while its persistence, with but slight modifications, into adult life, renders it quite unique. Within recent years a few cases have been recorded as having come under observation for the first time when the patients were from seventeen to nineteen years of age, but the previous history was obscure, and the precise date of development of the eruption was more or less problematical.

* Read before the nineteenth annual meeting of the American Dermatological Association, September 18, 1895.

Cases of urticaria with pigmentation have also been recorded as having developed for the first time in adult life, but Crocker and others have thrown doubt upon the propriety of classing such cases with the disease under consideration.

At the present day urticaria pigmentosa no longer possesses the distinction of representing a rare form of skin disease. Paul Raymond, in his elaborate thesis on this disease (1888), gives a *résumé* of twenty-nine cases that had been recorded up to that date. The statistics since then have been carefully looked up by my assistant at the New York Hospital, Dr. Lapowski (to whom I am also indebted for several recent references), and comprise an equal number of cases, making a total of fifty-eight cases recorded under this title. It is questionable whether some of these cases, especially those developing in adult life, should be included in this category. Arning believes that the cases in which the eruption has appeared for the first time from the fifteenth to the fortieth year are probably not urticaria pigmentosa proper, but ordinary urticaria ending with pigmentation. He believes it to be an intra-uterine disease in some cases.

The photograph I now present (Fig. 1), taken two or three months ago, gives a fair idea of the appearance of the eruption over a limited region of the back, and shows the letters constituting the words "urticaria pigmentosa" distinctly traced upon the surface. This property of the skin, known as factitious urticaria, but more properly termed *dermographism*, by virtue of which any impression made upon the skin is revealed by elevated lines or characters corresponding to the tract of irritation, has been a constant feature of the case from the first. This phenomenon has been recorded in about one third of all the cases reported. If it was manifest in the others it was unrecognized, or at least unnoted by the observer. In several cases the absence of this phenomenon was distinctly stated.

I would call your attention to the greater relative susceptibility of the pigmented lesions to this urticarial reaction as compared with the sound skin which is clearly manifest in the picture. You will observe that the lines forming the letters are not elevated uniformly, but that they present a moniliform or beaded appearance, each prominent bead representing the site of a lesion. This is especially noticeable in the downward stroke of the letters U, I, and P. These beads also give an accurate idea of the close approximation of the pigmented tubercles.

For purposes of comparison it may be well to give a *résumé* of the more characteristic clinical features of the case in the earlier stages, and thus note the retrogressive changes which have taken place in the eruption during the past fifteen years. From the *Archives of Derma-*

tology (January, 1879), in which my report of the case was published, I quote:

"The patient was a well-nourished, healthy-looking child, nearly two years of age. The body was covered with an eruption which had existed since the child was six months old, and which the mother



FIG 1.

states came out a month or two after vaccination. The spots varied in size from that of a pea to a ten-cent piece. They were distinctly elevated, and papular or tubercular in character. They covered the face and entire body, but were most abundant on the back and over the flexures of the joints—a few could be seen on the palms of the hands and soles of the feet; ordinarily they were of a pale-yellowish color, but when the child cried or became excited they changed to a

reddish or bright-scarlet hue. When violently rubbed or scratched, the elevations became more marked and the surface appeared as if nettle-stung.

"During the next twelve months there was quite an appreciable series of changes in the physical characters of the eruption. It was marked by an obvious increase in the number of pigmented spots, and the appearance, successively, of small crops of tubercles or nodulated masses, which were irregularly distributed, more frequently observed on the back, between the shoulders, and around the neck. These masses, which projected several lines above the surface, were not rounded or conical, but irregular in outline, as if formed by an aggregation of small nodules. They varied in size from that of a coffee-grain to that of an almond. When newly formed they were pinkish or bright red, but as they grew older they assumed a pale-yellowish or brownish color. They were firm to the touch, often of a pearly luster, giving a deceptive indication of fluid. Repeated punctures, however, were never followed by the escape of pus. Some had the appearance of a solid, lardaceous deposit, over which the skin was tensely stretched. They seemed to be capricious, both in their evolution and retrogression. They would develop suddenly, always after an urticarial attack, remain stationary for a variable time, and then undergo a rapid process of involution. I have frequently marked one or more of these protuberances with indelible ink, and on the next visit, a week later, they had entirely disappeared. Repeated observations showed that their average duration was from one to three weeks; sometimes, but rarely, longer.

"In August, 1888, the mother again brought the child to me for treatment. From notes taken at that time I read: A marked change may be observed in the appearance of the eruption. Only two or three of the tubercular prominences are to be seen, but the pigmented spots are more thickly disseminated. With the exception of a limited area of healthy skin at the root of the nose and over the malar prominences, the eruption covers the entire surface of the body; the palms of the hands and soles of the feet are profusely studded. They may be traced up into the hair, but do not occupy the superior region of the scalp; they are most abundant over the occipital portion, where the head presses the pillow in lying. A number may be seen upon the eyelids. The left upper lid was occupied for a while by one of the tubercular infiltrations, which prevented the retraction of the lid, compelling the patient to keep the eye partially closed. It was soon absorbed, leaving no trace but a patch of pigmented skin strikingly suggestive, both in outline and color, of a patch of xanthelasma. A few may be seen upon the penis and scrotum; they are numerous in the perineal and anal region, extending quite to the margin of the anus.

"On the trunk the spots have coalesced at their margins and lost their distinctive form, exhibiting a configuration altogether bizarre and impossible to describe. On the limbs the spots are abundant, but generally discrete.

"The mucous membrane of the palate and fauces is seen to be occupied by these spots, although the yellowish hue characteristic of the surface eruption is wanting.

"The color of the spots varies from a pinkish to a yellowish-brown tint, which deepens into a dark red, almost livid hue when the surface is hyperæmic. Upon the neck, chest, abdomen, and back there is a decidedly greenish cast in the pigmentation. These spots, upon pressure, lose their reddish tinge, but the yellowish stain remains unaltered.

"Most of the spots are elevated—some of them imparting a soft, velvety feel, like the sensation communicated to the finger when passed over the surface of a mole. A close examination of some of the patches reveals a condition altogether unique, according to my observation. There is a distinct hypertrophy of the epidermis, which seems to be punched up and lying loose, very much as the epidermis of a blister from which the fluid has partially exuded. This redundant epidermis ordinarily lies in minute wrinkles or folds, which, during the urticarial orgasm, become distended and form the characteristic wheals. This could be verified at any time by irritating an individual patch with the point of a pin or other instrument.

"Other patches, not so elevated, exhibited a curiously checkered appearance. They seemed to be studded with a number of small, flattened papules, separated by transverse lines or furrows—an appearance not unlike that of the skin over the knuckles and exposed joints when viewed through a magnifying glass. By putting the skin upon the stretch, these elevations could be obliterated temporarily.

"In this connection I would state that there was a marked difference in the duration of the wheals produced through sympathetic influence and those factitiously developed. Some time ago I had the case photographed. By moderately firm pressure with a blunt instrument I traced the letters U, P on the back, between the shoulders. In three minutes they appeared in the form of fully developed wheals. The child was much frightened and excited, and I observed on the neck, chest, and sides a copious eruption of wheals, which corresponded exactly with the configuration of the patches. These last subsided in a few minutes after the child was quieted, while those artificially produced remained out several hours, leaving in their train a half-dozen or more semiglobular protuberances, which did not disappear for several days. I have observed, as the effect of an unusually severe irritation, small vesicles, and at one time a large bulla, upon the surface of the prominences, but they dried up in the course of four or five days. There has never been any suppuration. The temperature of the skin, when actively hyperæmic, was raised from two to three degrees. Repeated experiments with Stewart's surface thermometer confirmed this observation.

"The eruption has not materially affected the child's health. He has frequent attacks of epistaxis, more or less violent, which usually come on at night; once or twice they have proved quite threatening

in severity. He has never had jaundice or any symptoms of liver derangement."

The patient was under my care at occasional intervals for several years, when he passed from observation and did not present himself again until March, 1895. He was now over twenty-one years old, nearly six feet in height, of stalwart, vigorous frame, with every evidence of perfect health. During this period, he informed me, his general health had been good; when about eight years old he had a mild attack of measles which kept him in bed only two or three days. The attacks of epistaxis had occurred with progressively decreasing frequency up to the period of puberty, since which they had ceased altogether.

The pigmented lesions have faded from the face, hands, and feet, the back of the scalp, and the mucous surfaces. The skin of the face has a decidedly pinkish tinge, becoming rapidly flushed or hyperæmic from the slightest emotive cause.

The eruption is abundant upon the front of the neck as far as the chin; a line corresponding to the condyles of the lower jaw would mark its facial limit. Upon the back of the neck the lesions extend quite up to the margin of the hairy scalp. Upon the arms they extend downward to the wrists, and upon the lower limbs to the ankles. Upon the limbs they are for the most part macular, and vary in size from a three-cent piece to a ten-cent silver piece. Upon other covered portions of the body, the surface of the trunk and nates, the eruption, with perhaps a slight modification in the size and color of the lesions, remains practically unchanged. The entire surface is thickly studded with slightly elevated pigmented lesions, each of which presents the curiously wrinkled appearance noted in childhood, as if the epidermal covering were too large for the subjacent derma. The lesions are all elliptical or elongated in shape, and the furrows or folds of distended epidermis are directed in the long axis of the lesion. This rugose condition was distinctly appreciable to the touch as well as the sight, and is admirably shown in the accompanying photograph (Fig. 2). The arrangement of the lesions seems to correspond roughly to the lines of cleavage of the skin. On the back and sides of the chest they are directed somewhat obliquely, on the abdomen transversely, to the axis of the body. The large nodular masses which formed a distinctive feature of the earlier stage are no longer present, although the patient says that they have continued to appear at long intervals.

There are, however, to be noted certain features of the eruption which were not present in childhood. Upon the sides of the trunk and

back there may be seen, interspersed among the old lesions, quite a number of pinhead to small pea-sized reddish-brown elevations, the dark coloration of which contrasts with the lighter pinkish tinge of the pigmented plaques. They are suggestive, both to the sight and touch,



FIG. 2.

of minute pigmentary moles. Upon the summit of the right shoulder there is a patch of pigmented skin, irregularly triangular in shape, about one and a half by three fourths of an inch in area, not elevated, and of a yellow or fawn color, something like a nitric-acid stain. The surface of this patch was slightly irritated, and within three min-

utes became elevated several lines above the niveau, the tint changing to a light straw color. Again, there may be seen upon the back, the neck, and abdomen a large number of little tabs of skin several millimetres in length, which look and feel very much like minute acrochordon, only they are more flattened and triangular in shape. They seem to spring from the borders of the atrophied lesions and ordinarily lie flat on the surface, but may be readily raised by passing the hand over the skin. These tabs or teatlike bodies probably represent a retrogressive change in the lesions. I was unable to determine the nature or mode of formation of these curious bodies. My suggestion to remove one or two of them for examination was the signal for the patient's disappearance. The pruritus, which was formerly most annoying and almost constant, has become quiescent and is only experienced at rare intervals, when the patient becomes overheated or the surface is irritated by rough undergarments.

Pathology.—The two most interesting points in this connection are the histological structure of the tubercles and the origin of the pigmentation which gives to these lesions their characteristic tint. Owing to an invincible objection on the part of my patient I have been unable to secure a portion of the skin for microscopical examination. Repeated examinations of excised macules and tubercles have been made by Thin, Pick, Unna, Raymond, Neisser, and others. Unfortunately, there is a lack of accord among investigators as to the pathological findings and their proper interpretation. Thin's conclusion that the structure of the tubercle was indistinguishable from that of lupus is entirely unsupported by others. Pick found minute extravasations of blood in the derma surrounded by small cells, the papillæ enlarged, and the epidermis unaltered. Unna declared that the hæmorrhagic foci described by Pick were purely accidental and in no way related to the pigmentation. According to his view, the tubercle is made up of a conglomeration of "mast" cells, closely aggregated in heaps surrounding the vessels, between which heaps lymphatic channels appear when spastic œdema occurs. These "*Mastzellen*" are not united migratory cells, but originate *in situ* from the connective-tissue cells by absorption of the nuclei of the mast cells. The coloration is due to crystals of hematin and pigment granules deposited in the prickle cell layer. This view has been confirmed by Neisser and others, and with some modifications has been generally accepted.

Nature and Pathogeny.—Notwithstanding the abundant opportunities for the clinical and microscopical study of this curious dermatosis there are still many points relating to its nature, pathogeny, and pathological relations which have been by no means definitely deter-

mined. The name given to it by Sangster has been generally accepted, even by those who do not admit its substantial identity with urticaria, simply as a matter of convenience. By most recent text-book writers it is described as a variety of urticaria. While it presents many analogies with this affection, especially with the form known as urticaria perstans, yet it must be conceded that in its clinical course and anatomical changes it presents many points of difference, while it is especially distinguished by its hyperplastic formations and permanent pigmentation.

Unna says: "Ordinary urticaria is a plain angio-neurosis without any histological substratum; urticaria pigmentosa is a primary, persistent, progressive, and trophic disturbance of the skin. The œdema in the latter is limited to the papillæ, while in urticaria simplex it is spread over the whole affected skin. The clinical fact that the eruption never changes its localization shows clearly enough that from the beginning a deep-rooted disturbance in the structure of the skin took place."

Raymond, in his admirable study of the disease, says: "By its course, by its symptoms, objective and subjective, by its slow evolution, tending to cure after several years' duration, by its histological alterations, urticaria pigmentosa is clearly distinct from other processes which it is found convenient to group under the denomination of urticaria. Further, urticaria pigmentosa constitutes a special morbid type, an affection with a physiognomy so distinct that it becomes impossible to consider it as a simple variety of urticaria."

Another point of interest is the relation of the pigmented patches to the urticarial wheals. Do the former ever occur as primary phenomena, or are they always consecutive to the urticarial wheals? In some cases they have been observed at birth or within a few days thereafter. In such cases, obviously, if urticarial attacks preceded their development, they must have been intrauterine.

It is a clinical fact that the urticarial reaction is invariably intensified in the pigmented patches. In my own case the sound skin has always been subject to factitious urticaria, although in a less pronounced degree than the pigmented lesions. In other cases, however, the sound skin was immune to this reaction, and it was only after the development of the pigment patches that the particular areas they occupied became endowed with this urticarial aptitude.

Again it may be asked, Are the urticarial elevations and the pigmented patches expressions of the same or different morbid processes? Is there a causal or merely a coincidental connection between them?

Upon this point Neisser says: "I have not the slightest doubt that in urticaria pigmentosa we have to do with '*Mastzellen Tumoren*,' but

how explain the connection between urticaria and the '*Mastzellen*'? I believe that the two stadia—urticaria and tumorlike formations—are two entirely different things, each for itself, and a causal connection between them is not clearly established. The tumors are of an inherited-born disposition, like the embryo deposits in tumors. The urticaria is only the chance cause of their apparition—the same connection as between xeroderma pigmentosum and erythema."

In the present state of our knowledge it is impossible to give a satisfactory solution of these pathogenic problems. We must recognize, however, that there is in almost all cases a history of urticarial attacks preceding the appearance of the pigmented patches, and this urticarial tendency is present from the inception of the disease and manifest during its entire course. The urticarial element is a salient, distinctive feature, and is just as essential to the complete morbid type as are the pigmented patches. My own view, as expressed in my original article, was that the hyperplasia and pigmentation were the result of the intense and more or less constant congestion of the skin consequent upon the frequently recurring attacks of urticaria. In opposition to this view it has been claimed that pigmentations have been observed to promptly follow wheals of the skin experimentally produced, and that in such cases long-continued irritation could not enter as a pathogenetic factor.

My object in reporting this case was to make a contribution to our knowledge of the clinical history of urticaria pigmentosa rather than to discuss the vexed question of its identity with urticaria. I have always been disposed to regard it as belonging to the urticarial group rather than as representing a distinct type of disease. Certainly the underlying pathological conditions which give rise to the phenomena must be much the same in both affections. In all urticarias we assume the existence of a specific predisposition of the nervous system to vasomotor disorder. In a disease in which the angio-neurotic phenomena are attended with trophic changes there is evidently a more profound disturbance of the nervous system. In urticaria pigmentosa there is, conjoined with this vaso-motor hyperexcitability, a disorder of the trophic centers which regulate nutrition.

A UNIQUE CASE OF AGMINATE FOLLICULITIS OF PARASITIC ORIGIN.*

By M. B. HARTZELL, M. D.,

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W E. J., thirty-two years of age, a repairer of signals and switches in the employ of a railway company, was referred to me in November, 1894, for advice concerning a cutaneous affection situated upon the left leg. Upon examination the disease was found to extend over the greater part of the leg, and to consist of two apparently different kinds of lesions, although when examined closely these were found to be but different stages of the same morbid process. Immediately above the internal malleolus was a palm-sized patch, irregularly oval in outline, elevated considerably above the surrounding healthy parts, and covered with a scanty, yellowish-gray, soft crust which could be easily removed. Beneath this crust was a bright-red, uneven, coarsely granular surface containing numerous small openings from which slight pressure caused a scanty sero-purulent fluid to exude. From the appearance of the patch it was evident that it had been formed by the coalescence of several smaller ones through the peripheral extension of the latter. Scattered about over the inner and anterior aspect of the leg, from the ankle to the knee, were a number of smaller plaques of similar appearance, circular in shape, and varying in size from a dime to a silver dollar (see Fig. 1). Close examination of these patches showed that they were made up of swollen and inflamed hair-follicles, from the most of which the hairs had fallen, although a considerable number still remained in position. In addition to these plaques there were numerous pinhead to pea-sized pustules, arranged in groups and singly, each pierced by a hair, scattered irregularly over the entire leg, but most abundant upon the anterior surface. The disease was attended by paroxysms of intense itching, and the leg was at times so painful that walking was difficult. On this account the patient was compelled to give up his work for a considerable time. The history was as follows: Some six weeks before coming under my observation a trifling injury had been received just above the internal malleolus through falling upon a sharp stone; this apparently healed within a few days. A week or ten days later a

* Read at the nineteenth annual meeting of the American Dermatological Association, Montreal, September 19, 1895.

single pustule made its appearance at the site of the injury, and this was soon followed by others in its immediate neighborhood. A small patch was thus formed which grew rapidly by the addition of new pustules at the margin until it reached the dimensions already indicated. The primary lesions of the eruption were always pustular, but as soon as a sufficient number of follicles were invaded to form a patch the size



FIG. 1.—Agminate folliculitis.

of a dime the pustules disappeared, except at the margin, where new ones were constantly appearing. Notwithstanding various modes of treatment, the disease had continued to invade new territory; new pustules were constantly making their appearance on various parts of the leg, which frequently became the center of new plaques, and the older

patches steadily grew larger through the addition of new lesions at their edges. After a time the large plaque just above the malleolus, where the disease first made its appearance, began to undergo involution in the center while extending at the margin, so that at the end of ten days or two weeks it had assumed the shape of a broad ring four or five inches in diameter. Still later in the course of the disease the eruption took the shape of gyrate bands an inch or more in width, through this process of marginal extension and central involution of the patches. Many discrete pustules appeared from time to time which lasted but a few days and then disappeared. At various times furuncles formed, which in some instances grew to considerable size and were extremely painful, one over the tendo Achillis being unusually large and troublesome. A little time after the largest patch had been transformed into a ring, as has already been described, the follicles in the center of this ring became inflamed anew, and shortly there was a dollar-sized disk surrounded by a ring, as is sometimes seen in *tinea circinata*. It was evident that the seat of the disease was in the hair-follicles, and, from the mode of its extension, it seemed likely to be due to some infection. With the view of learning, if possible, something of the real nature of the malady, portions of the diseased skin were excised, care being taken to include as nearly as possible all stages of the disease. The pieces excised were fixed in alcohol, imbedded in paraffin, and cut and mounted, for the most part, serially. The sections were stained with hæmatoxylin and eosin, and with the triple stain known as the Biondi-Heidenhain mixture, this last giving by far the most satisfactory results. The portions examined included parts of the larger agminate patches and several discrete pustules. The latter, being the primary lesions, will be described first. Immediately surrounding the hair in the upper part of the epidermis was a small cavity filled with pus-cells and epithelium in various stages of degeneration, together with a few round spores and fragments of mycelial threads. These fungous elements were only found in the abscess cavity, none of the sections of the pustules showing spores or mycelium elsewhere. The substance of the hairs was apparently not invaded, since in none of the sections which passed through the hair-shaft were either spores or mycelium seen. Sections stained with gentian violet in the usual manner showed considerable numbers of staphylococci in the cavity of the pustules and in the upper portion of the rete. Those parts of the corium immediately beneath the pustules presented decided evidences of inflammation, there being a moderate amount of round-celled infiltration in the papillary layer. Upon the whole, however, the amount of tissue change was slight, and limited to the more superficial portions of the skin.

In sections made from the agminate patches the pathological alterations were much more marked. In the superficial parts of the epidermis were many small cavities containing pus, such as have been already described when considering the pathological changes associated with the pustular lesions. The rete was greatly thickened, being at least four or five times thicker than normal; the papillæ were much enlarged both in length and breadth, and contained large numbers of lymphoid cells which were so abundant as to obscure the line of demarcation between the rete and the papillary layer. The greatest changes, however, were in and around the follicles. Where the sec-



FIG. 2.—Section of follicle showing fungus contained in it. *a*, mycelium; *b*, mouth of follicle $\frac{1}{10}$ in. objective. No ocular.

tions passed through these they were seen to be greatly enlarged and distorted; they presented the appearance of large angular cavities filled with round cells in the midst of which were a few round and oval spores and an abundance of mycelial threads (Fig. 2). In many sections the mass of cells and mycelium extended some distance into the

corium, having forced its way through the bottom of the follicle. Of the fungous elements the mycelia were by far the most abundant, the spores being not only relatively but absolutely few in number. The former consisted of long, curved, and branching threads with joints of

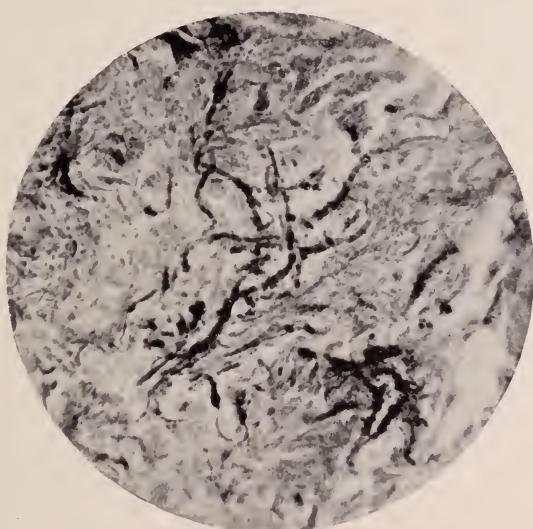


FIG. 3.—Mycelium in follicle. Zeiss, D. D. No ocular.

moderate length, and smooth, straight threads having neither branches nor joints. The spores were, for the most part, scattered about through the mass of lymphoid cells and epithelial *débris* which filled the follicle. In some sections there were grapelike clusters of spores attached to the mycelium, a form of sporulation sometimes observed in cultures of the trichophyton, but rarely seen in the ordinary tineas. The fungus presented all the characters of the trichophyton, although the individual elements were considerably larger than those seen in *tinea circinata* and *tinea tonsurans* (Fig. 3).

Before the ætiology of the disease had been definitely determined various remedies had been employed with but little or no beneficial effect. Previous to coming under my care the treatment had consisted chiefly in the application of antiseptics, such as mercuric bichloride, hydrogen peroxide, iodoform, but these only aggravated the existing inflammation and caused great pain, without in any way retarding the progress of the malady. Lotions of resorcin, ten to fifteen grains to the ounce, gave marked relief from the pain of which the patient always complained, but failed likewise to prevent the spread of

the eruption. When the presence of the trichophyton was discovered, an ointment of sulphur—at first thirty grains to the ounce, later one drachm—was ordered, and improvement began at once, at first slowly and then more rapidly. This improvement was steadily maintained until, at the time of writing, entire recovery has taken place. The duration of the disease was in all about ten months, during five of which the patient was unable to attend to the duties of his position because of his inability to stand or walk any length of time; and at least two thirds of the surface of the leg was invaded by the parasite. Notwithstanding the violence of the inflammation no scarring resulted, and no permanent loss of hair. Careful inquiry was made to discover, if possible, the source of the contagion, but without result. In his recent elaborate work upon human trichophytosis Sabouraud asserts that the suppurative forms of the disease are due to that variety of the trichophyton found upon the horse; and on this account a careful search was instituted to learn whether this source of infection was probable in this particular case. The patient was positive, however, that he had not been in contact with horses for many months previous to the appearance of the disease. There were neither cats nor dogs in the patient's household which might have been a source of infection, nor did any other member of the family have any cutaneous malady.

Outside of French dermatological literature but little is to be found concerning agminate folliculitis. Quinquand, Leloir, and Pallier have reported cases and made them the subject of more or less exhaustive investigation, Leloir in particular having studied the pathology and pathological anatomy.* This author, basing his opinion upon bacteriological examination, places the malady among those due to the pus-forming micro-organisms, and states explicitly that not the least trace of the trichophyton was to be found in the cases examined by him. Clinically, however, the cases reported by these authors resembled to a considerable degree the one the subject of this paper, although none of them occurred in the same situation, occupied so large an area, nor ran so prolonged a course attended by such severe symptoms. But the most striking agreement is to be found in the pathological anatomy as described and figured by Leloir, the seat and character of the pathological alterations being precisely the same. In view of the very considerable clinical resemblances, and the exact correspondence of the pathological histology, I can not but express the suspicion which I entertain, that the agminate folliculitis of the French authors is most probably a deep trichophytosis such as has been described in this paper,

* See *Annales de dermatologie et de syphiligraphie*, 2me série, tome v, p. 437.

the fungus having been overlooked through lack of a proper selective stain. In this connection I wish to call attention to the excellent service rendered by the triple staining fluid known as the Biondi-Heidenhain stain in the examination of sections for the trichophyton. This reagent exercises a selective staining action upon the elements of this fungus, staining them a dark purple, which is in marked contrast to the green of lymphoid cells and cell nuclei, and the various shades of red of the fibrous tissues and cell protoplasm. This peculiar property of the stain has not yet been mentioned, so far as I know, and is one possessed by no other stain with which I am acquainted.

Before concluding this paper I wish to refer to the case of follicular hyphomycetous disease reported by Dr. Duhring and myself some little time ago.* The chief features of this case were, very briefly, as follows: The disease, which was of three years' duration, occurred in a boy fifteen years old, who had upon the sides of the neck several patches of papular and papulo-ulcerative lesions, arranged in a crescentic manner, which bore a considerable resemblance to a mild form of verrucose lupus vulgaris. The course of the disease had been extremely chronic, the patches extending slowly on their convex margins and undergoing spontaneous involution on the concave sides. A considerable number of the follicles had been destroyed, and some punctate scarring had resulted as a consequence. There was neither pain nor itching. Although, as is evident from the above brief description, this case differed materially in its clinical aspects from the one the subject of this paper, yet sections made of excised lesions of the two diseases presented the same appearances under the microscope. There were the same inflammatory changes in the follicles, and the same kind of fungous invasion as the cause of these changes.

In conclusion, these cases, which depart so widely from the usual text-book account of trichophytosis, teach us that the trichophyton may penetrate the deeper parts of the skin in regions other than the scalp and beard, giving rise to extensive and painful disease; and they further teach us the necessity for enlarging our conception of the pathological importance of this fungus.

* See *American Journal of the Medical Sciences*, March, 1895, p. 283.

TWO CASES OF BROMIDE ERUPTION.*

By GEORGE THOMAS JACKSON, M. D.,

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IT so happened of late that within eighteen months I saw two cases of skin eruption, of precisely similar character, the like of which I had never seen during all the previous years. I was puzzled greatly by both these cases, and it was only after I had seen the second case that I felt sure that it, as well as the first case, was one of bromide eruption. The first case was that of Mrs. A., a young woman of nineteen years and a bride of five months. Shortly after her marriage she became ill, and developed an endometritis and a salpingitis. She was under the care of my friend Dr. F. W. Jackson, to whom I am indebted for the case. For some weeks before I saw her she had been in a very nervous condition, for the relief of which she was given bromide of potassium in fifteen or twenty grain doses several times a day, according to the requirements of the case. This she took for several weeks. Afterward she was given other drugs, and was operated on for her uterine and tubal diseases. Shortly after the bromide was stopped an eruption appeared on the forehead that is said to have looked, at first, very much like chicken pox. The eruption spread from the forehead over the body, and the little vesicular lesions changed to sluggish pustules.

I was called in to see the case in consultation on the 20th of February, 1894, after the eruption had lasted four weeks. I found the patient much emaciated, like one who had gone through a long siege of illness. There were about a score of prominently raised, flat, firm, whitish-yellow lesions on the face, which, for want of a better name, I would call pustules. They contained only a very little pus, and that mostly at their summits. Most of their contents was of a cheesy consistence. They had a rather warty look, their surfaces being uneven, like the surface of a raspberry. Some were crusted. They were of the size of a large pea to a small cherry, indolent, with a slight zone of redness about them. Similar discrete lesions were scattered over the arms and legs. On each leg there was also a single large, irregular, elevated, firm lesion, placed with almost absolute symmetry. In the

* Read at the nineteenth annual meeting of the American Dermatological Association, Montreal, Canada, September, 1895.

scalp there were some crusted lesions. Where the crusts had fallen from the lesions on the forehead, slightly pitted, fading red scars were left. When a crust was forcibly removed, a surface somewhat like that of a raspberry was exposed, showing a number of bleeding points.

There were absolutely no glandular enlargements, nor sore throat, nor other symptom of syphilis. A careful examination of the husband failed to show any evidence of syphilitic infection, or to elicit any history of syphilis. He frankly confessed to several attacks of gonorrhœa, and to having contracted one shortly before his marriage.

In spite of the absence of corroborative evidence of syphilis, and in spite of the fact that the eruption did not correspond to any type



eruption of syphilis, I made the diagnosis of syphilis with a question mark. The case was seen again by me in about ten days. A number of the old lesions had disappeared, leaving scars and stains. Some new lesions were on the trunk. On the legs the large lesions had gone on to the development of irregular, sharply cut, painful ulcers, with exuberant granulations. The general health of the patient had improved.

This case was treated with the protiodide of mercury internally, and the ointment of the ammoniate of mercury and mercurial plaster locally, and made a good recovery in a few weeks. I saw her for the third time in May, when she came to ask if there was not some means for removing the red spots left by the eruption. The lesions had ceased from coming out for some weeks.

This case was a puzzler to me, and often and often I turned the matter over in my mind and wondered what the thing was. I remained in doubt until in February of this year (1895) Dr. Annie S. Daniel sent to my clinic at the Woman's Medical College of the New York Infirmary a little child, whose picture, kindly taken by Dr. G. H. Fox, I show you (see cut).

When I first saw this case it had only a few large pea-size lesions on the face and buttocks, that looked very much like impetigo contagiosa. Some two or three weeks after that I saw the child again, when it had a large number of discrete lesions scattered over the whole body, but most marked on the face and extremities. These presented the same warty surface, the same indolent course, the same scanty amount of pus, and the same slight zone of redness that the lesions of the first case presented. In this case there were more large lesions, some with central depression, reminding one of molluscum. Like as in the first case, the larger lesions on the legs broke down after a while and formed indolent, raised, irregular-shaped ulcers. I showed this case to three of my colleagues, skilled in dermatology, and we decided that it was either a drug eruption or syphilis of unusual characters.

I looked up the previous treatment of this case and found that some two or three weeks before I first saw it it had been given bromide of potassium in the usual doses for children on account of sleeplessness. But, as in the first case, it had taken no bromide for some weeks, and yet the lesions kept on appearing.

This case wandered away into the hands of another physician, but happily Dr. Emily Lewi, one of the staff of the infirmary, is his assistant and knew the case. She told me that the child made a good recovery in a few weeks under arsenic and no antisyphilitic treatment. There was absolutely no evidence of syphilis in the parents of the child nor in the history of the case.

Upon the second visit of this case I said to myself that whatever it might be it was the same disease as in the case of Mrs. A. Further observation and study of the case led me to inquire as to the administration of bromide in the first case with the result above given. I am convinced that both of them are examples of a rare form of drug eruption, one of the multiform manifestations of bromide intoxication.

The peculiar features of these cases are the length of time that apparently elapsed between the stopping of the drug administration and the appearance of the eruption; the long continuance of the appearance of new lesions after the stopping of the drug, and the character of the eruption. But none of these things are against the diagnosis; in fact, they rather favor it. Crocker, indeed, gives as one of the diagnostic symptoms of the bromide eruptions that the lesions sometimes do not appear until some days after the drug has been stopped, and continue to appear for some days following its stoppage. It is supposed by some that the secreting capacity of the kidneys has a great deal to do with the appearance or nonappearance of these drug eruptions as well as the factor known as idiosyncrasy. It is remarkable

that in both of the cases now reported the drug was given for nervousness in the course of diseases that greatly lowered the general condition of the patients, and it is likely that this poor state of the patients had much to do with the appearance of the eruption. So much do I believe this to be the case that I would not be at all surprised not to see an eruption follow the administration of the salt, now that the patients are again in their usual health. The particular lesion in these cases corresponds most closely to the conglomerate form of other writers, and the ulcers are the elevated ulcer of Amidon and others.

I know, and you know, how difficult it is to convey an idea of a strange eruption to one who has not seen it unless one has the use of a colored picture to aid his imperfect words. The reason for my now recounting these cases is that they puzzled me, and that I thought their recital might bring out some discussion that would be of value to all of us. Let this be my apology for my poor attempt at word painting.

A good colored picture of a case similar to my second case is in Crocker's Atlas, Plate XXXV. Another case is shown in Morrow's Atlas, Plate L, and in Taylor's Atlas, Plate XLIX. In all these cases there was more inflammatory action than in my cases.

PHOTOGRAPHS OF TWO ANCIENT PERUVIAN VASES. WITH
SOME PARTICULARITIES PRESENTED BY THEM, AND
SOME OBSERVATIONS ABOUT THEM.

By ALBERT S. ASHMEAD, M. D.,
New York.

PROF. BASTIAN, of the Royal Museums for Ethnology, of Berlin, sends me three photographs (selected by Dr. Seler, of the American department) of ancient Peruvian pottery, two of them representing one subject, front and side view, full length: evidently a dwarf is meant, with tuberculated skin; he is scratching his back and his chest, with the natural throwing of his head on one side. His upper lip is eaten away on both sides. There are scars on his face (Figs. 1 and 2). The other one is a huacos figure, with scarred face, and nose eaten away (Fig. 3).

Prof. Bastian says that more extensive particulars will be published in the forthcoming report of the Anthropological Society, in the *Zeitschrift für Ethnologie*, which he promises to send me. He added that Prof. Virchow, who examined one of them, says that there might be indications of lupus in it. I can not say which the professor means.

I should say that, according to my opinion, the figure represented scratching itself offers no evidence of leprosy, fingers and toes being



FIG. 1.



FIG. 2.

perfect. This is probably the figure which Virchow means. The other one may be meant for syphilis or lupus.

Regarding the other photograph of huacos potteries which I published in my article on pre-Columbian leprosy, Dr. Hansen, of Norway,

to whom I submitted it, writes to me:

"As to the photographs of Peruvian bottles, I can only say that the faces do not present any signs of leprosy; the noses seem to be somewhat damaged at the tips, but perhaps the old Peruvians were stump-nosed. There are no tubercles, and no phenomena of anæsthesia."

I must remark here that the pygmy, represented by two of the Bastian photographs I send you, evidently does not suffer from anæsthesia.



FIG. 3.

Society Transactions.

AMERICAN DERMATOLOGICAL ASSOCIATION.

NINETEENTH ANNUAL MEETING, HELD IN MONTREAL, CANADA, SEPTEMBER
17, 18, AND 19, 1895.

President's Address.—DR. SHERWELL, of Brooklyn, president of the association, welcomed the members and congratulated the association on the full attendance and the promises held out by the programme for a successful meeting. His address took the form of a statistical review of public dermatological service which went to show the excess of aliens and their offspring over native-born or patients of American parentage demanding treatment in the various skin clinics.

The importance of constitutional treatment in skin diseases was then taken up, and the suggestion was made that this subject form one of the topics for general discussion. The speaker did not advocate internal *versus* external, but rather as coincident treatment.

Report of Cases of Angiokeratoma of the Scrotum. Raynaud's Disease of the Ears. Lupus Erythematosus of the Hands and Arms, disappearing during Pregnancy; with Colored Drawings and Photomicrographs.*—By DR. J. A. FORDYCE, of New York.—These cases were discussed separately.

DR. BOWEN complimented the reader on the excellence of the photographs shown.

DR. WHITE thought the keratoma element not very well marked. He asked, if the angiomatic features were absent, whether the keratomatous changes would be sufficient for diagnosis.

DR. FORDYCE said he should not have called it angiokeratoma if the angiomatic condition had not led to marked changes in the epidermis. The condition is not an angioma in the sense of newly formed blood-vessels, but rather a dilatation of the existing papillary vessels. The changes in the stratum corneum are not marked, but those in the rete are.

DR. MORROW had seen a case clinically identical, which he thought also pathologically so. He thought the condition rightly named.

DR. ZEISLER, on reporting a case of his own, had stated that the clinical picture of the disease was not yet complete. In any new disease additional features may be subsequently discovered. Though his own case had seemed to correspond with the typical pictures as presented by Mibelli, still there were points of difference from that of Dr. Fordyce. An ætiological reason for its production exists in the factors which favor stagnation of blood. In his own case the horny layer was four or five times as thick, he should judge.

DR. HYDE wished to know if there was any linear arrangement to the lesions on the scrotum.

DR. FORDYCE said they seemed to follow the course of the vessels.

DR. SHEPHERD inquired if there was any difference between this and ordi-

* Will be published in this Journal.

nary varicosity without keratoma. In varicose veins there is enormous vascularity of the skin.

DR. ZEISLER agreed with Dr. Shepherd in considering angiokeratoma a distinct varix.

DR. FORDYCE said that the criticisms of Dr. White and Dr. Zeisler were to a certain extent justified. We would not, however, expect to find such marked hypertrophy of the horny layer in lesions of the scrotum as on the hands, where the stratum corneum is anatomically so much thicker. In his case the existence of blood spaces in the epidermis, together with marked hypertrophy of the rete, corresponded closely with the description given by Mibelli and Pringle. The keratomatous changes were to be considered secondary.

Raynaud's Disease of the Ears.—DR. BRONSON thought the clinical picture in Raynaud's disease somewhat fuller, and the disease a more general one. In gangrene of the face he always looked for a history of syphilis. Perhaps here a neuropathic condition originating in syphilis was the cause.

DR. WHITE said the localities here affected did not preclude the idea of Raynaud's disease. He had observed precisely the same localization in both ears where the fingers were also affected, but never the ears alone.

DR. SHERWELL had found a history of syphilis in most of his cases, and a typical case recovered under specific treatment. The ears are subject to the same phenomena from cold as the finger tips.

DR. FORDYCE said Raynaud's original monograph had not discussed the pathology. In his own cases there were probably changes in the arterial coats. The term is a general one, including cases resulting from endarteritis and other pathological conditions.

Hydroa Æstivale.*—By DR. J. E. GRAHAM, of Toronto.

DR. ZEISLER believed that exposure to the sun was an ætiological factor in every case. He had seen two cases lately. In one the eruption occurred on the backs of the hands, ears, and face, and recurred after an interval of a few weeks. He did not see the necessity of calling these cases any form of hydroa, or to put these cases together under a new title. He considered them simply a form of erythema multiforme.

DR. WHITE said we do find cases which correspond accurately to this type of the vacciniform lesion. He was not inclined to regard this as a specific individual affection. The type is not always absolutely the same in successive attacks. He thought that certain cases of dermatitis multiforme in children, described as such by some writers, were typical of this disease. As Dr. Zeisler remarked, we do see some forms of erythema multiforme simulating very closely this disease. He recognized a marked difference between these cases and the disease which he called erythema multiforme.

DR. BOWEN said in a recent case occurring in his practice a histological examination was made. He thought Dr. Graham's first case a typical one of hydroa vacciniforme. The second is not so much so. In the case he examined the first lesion was an inflammation which was followed by necrosis. The histological examination showed that it was only in these cases of umbilication that we got necrosis extending to the epidermis and corium. He did not see much resemblance between the purer types of this affection and

* Will be published in this Journal.

erythema multiforme, which latter, as it has been hitherto understood, he did not think was ever followed by a scar, as would be the case if any necrosis existed. In his case the scarring was very distinct, the boy looking exactly as if he had had smallpox.

DR. HARTZELL had a case of this kind in a boy of fourteen years who every summer suffered from inflammation of the skin of considerable violence. There was a marked hyperæmia, which was in time followed by exfoliation of the skin, not necessarily following exposure to the direct rays of the sun, but continued throughout the summer. The difference between his and the case reported was simply one of degree of inflammation.

DR. PHILLIPS said his treatment of the case had been altogether external. He had thus obtained satisfactory results. His protective treatment was original so far as he knew, although he had since learned that Dr. Unna had previously employed this method. To lessen the irritability of the violet rays he proposed a bassorin paste with a solution of the bisulphide of quinine. He also had thought of trying in addition to the bisulphide enveloping the skin in some yellow covering which would annihilate the blue, indigo, or violet rays of the spectrum. He hoped by these experiments to throw some light upon the subject as to whether the condition is really the result of the chemical rays or not.

DR. JACKSON mentioned the case of an Irish boy aged ten who had this eruption since he was three or four years old. The face, hands, and ears were affected, but especially the face; and when the active lesions had subsided the pitted scars were very distinct. Although present in summer, he seemed to suffer more in winter, especially on bright days. This bears out the experience of Bowles, who mentions a similar condition occurring in Alp climbers. He found that the effect came largely from the reflection of the sun's rays from the snow. He induced certain of the climbers to use a brown ointment, and those protected enjoyed immunity.

DR. SHEPHERD had seen within the past two weeks a girl of nineteen who had suffered from this affection for three years. Her experience seemed to be very similar to that of a fellow-traveler who had once crossed the Alps with the speaker. She attributed her attacks to driving or excessive walking in the open air. Although the face was enormously swollen and covered with bullæ, the ears were the only parts to show scarring.

DR. ALLEN had observed bullous eruptions following direct or indirect exposure to the sun, and more recently, since reading experiments of the effect of the chemical part of the spectrum, he supposed that this was the explanation. As a consequence it seemed to him that the protective method of treatment was the only reasonable one.

Two Cases of Bromide Eruption.*—By DR. GEORGE THOMAS JACKSON, of New York.

DR. MORROW thought these severer forms of eruption from bromide were apt to be seen in children, as their proneness to vascular disorders was well known. All our knowledge of the production of drug eruptions opposes the view that lesions continue to appear after the administration is stopped. It is difficult to explain why the effect should be prolonged.

DR. WHITE did not think the patient's general health had much to do with

* See page 462.

the determination of an eruption. It is the result of individual idiosyncrasy. He was not familiar with any other drugs which could produce the lesions described by Dr. Jackson.

DR. HARTZELL spoke of the frequency with which valvular heart disease was associated with the severer forms of bromide and iodide eruptions.

DR. FOX said some syphilides in children resemble closely the bromide eruptions. Mistakes are likely to occur when bromides are being administered to children known to be syphilitic. The drug may also tend to "bring out" the cutaneous syphilis.

DR. GRAHAM spoke of cases in which a history of bromide administration is hard to obtain, thus leading the physician into error or doubt.

DR. ALLEN said that at times the large bullæ due to iodides assumed a fungating appearance simulating those from bromide. He had seen the eruption persist for weeks after the drug had been stopped. When an eruption follows a minute dose, as seen from quinine, nerve influence rather than skin irritation due to elimination is to be invoked.

DR. SHERWELL said that dermatological knowledge had advanced, for, whereas some years ago such a case as described might be called yaws or something of the kind, now the true nature is generally recognized. Still, cases are seen by him now and then surely due to the iodides, which are practically bromide eruptions. He had seen the eruption become intensified several weeks after the drug had been stopped.

DR. HYDE mentioned hydriodic acid as a drug which had been reported to him as followed by this form of eruption, and thought there might be others.

DR. MORROW said long-continued administration is usually necessary to bring about the required changes of nutrition in the tissue.

DR. HYDE, while admitting that most drug effects upon the skin quickly subside on stopping the injurious agent, still this particular one did not. Children to whom bromides are given are usually in some way out of health, as is shown by the very fact of the drug being required.

DR. JACKSON said he had seen bromide lesions persist for weeks after the drug was stopped in a patient he had treated since writing this paper. It was the old lesions which refused to disappear rather than new ones which arose.

The Epitrichial Layer of the Epidermis and its Relationship to Ichthyosis Congenita.*—By DR. JOHN T. BOWEN, of Boston.

DR. WHITE, referring to the desquamation of the early formed hairs which takes place *in utero*, wished to know if Dr. Bowen had noticed whether or not they were connected with this epitrichial layer, or whether they penetrated deeper and were a part of the composition of the fœtus. Relative to the disease ichthyosis congenita, as illustrated by the plate of Hebra, which the latter authority regarded as a practically fatal disease, he would say that he had known some cases to recover. It was quite evident that Hebra regarded the condition thus depicted as something far more serious than this desquamation persisting into adult life.

DR. SHEPHERD said this paper showed the importance of the study of embryology. Many of the anomalies which occur are easily explained by the theory of persistence of a foetal condition. It seemed to him that the theory pronounced by the reader of this paper was a very correct one.

* Will appear in this Journal.

DR. SHERWELL wished to know from Dr. Bowen if the persistence of this epitrichial layer was not in his opinion rather an instance of extra conservatism on the part of Nature, than a neglect, as suggested by Dr. Shepherd.

DR. BOWEN, in answer to Dr. White, said in the animals experimented upon the hairs were all underneath the epitrichial membrane, which was situated outside them. In man the hairs do not appear until after this membrane was lost, at least not to any extent. Of course, it is hard to speak positively on this matter, which he thought would form an extremely interesting study. In regard to Hebra's case, he did not wish to be dogmatic. He only said it resembled such a case. In answer to Dr. Sherwell, he said he simply called it a persistence of the epitrichial layer, and he could say no more.

The Infected Scratch and its Relation to Impetigo and Ecthyma.*—By DR. HERMANN G. KLOTZ, of New York.

DR. FORDYCE said in his opinion all cases of impetigo and ecthyma were due to a local infection with some one or several of the pus-producing organisms.

The nature of the lesion and the extent of the ulceration depended upon a superficial or deep infection, and, of course, to some extent upon the condition of the patient.

DR. HARTZELL did not think that either impetigo or ecthyma had any right to be considered more than mere incidents in the course of other cutaneous diseases, being simply the result of infected scratches. Every one knows what ecthyma is, although our ideas are not so definite as to impetigo. Impetigo, as described by Dühring, is a very rare disease, and a very different one from impetigo contagiosa. If, when we use the terms impetigo and ecthyma, we understand them to indicate clinical varieties of certain lesions in the skin, then they are all right; but if we use them as designating separate pathological conditions, they are wrong.

DR. ELLIOT had personally ceased to regard the majority of these cases as anything more than local conditions due to infection, which may have been brought about by scratching, or may have been caused by the rubbing of the staphylococcus into the skin. In his books nearly all these cases are included under the head of local septic dermatitis. As to the different characters of the lesions, he thought they depended largely on how far the staphylococci penetrated the skin. If only the corneous layer, you had a simple pustular lesion; if the rete, you had a more severe type of lesion.

DR. WHITE thought if we accepted the possibility of a pustular lesion not due to the staphylococcus, it would be well to keep the name for that purpose. There is the pustular lesion in some forms of syphilodermata, for instance. We may have a scratched skin for a lifetime without infection. There must be something else besides the germs, which are always present.

DR. GRAHAM considered the name *pyodermia* given by Dr. Klotz a good one, inasmuch as it assimilated the condition with pyothorax and other allied conditions. We recognize several forms of pyothorax as caused by different pyogenic organisms. It seemed to him, however, that the name of the germ should be added to the name pyodermia.

DR. BOWEN said there seemed a great deal of confusion as to what is meant by these separate terms. Of course, no one regarded the names ecthyma or

* Will appear in this Journal.

impetigo as more than the names of symptoms. We are obliged to classify these cases, and he found it difficult to know where to put them. What are we going to call impetigo contagiosa? Are we going to limit its use to the typical cases, such as those mentioned by Dr. Fordyce, or are we going to include under its head all cases of the infected scratch; and, if so, where are the cases such as the one Dr. Klotz describes to be placed? It seemed to him a fit and proper subject for the committee on nomenclature to consider.

DR. ZEISLER thought we were now beginning to complicate matters. He had always been opposed to new names, and he believed the term impetigo as used at present was pretty clear. He thought that the original appearance of pustules was characteristic of impetigo. When upon an otherwise normal skin a series of lesions occur, and after a while take on a pustular character, we have impetigo, and it corresponds to the impetigo herpetiformis of Hebra. As to impetigo contagiosa, it is pretty well established as a clinical entity. He recommended that the infected scratch be called dermatitis traumatica. He thought we had already too many names for our diseases, and he did not believe the infected scratch deserved one for itself.

DR. KLOTZ wished to touch upon one subject not mentioned by any of the speakers; he referred to the absence of infection in persons suffering from chronic pruritus; the scratching of these individuals is not usually followed by infection. He fully agreed with Dr. Zeisler's strictures on the evil of introducing unnecessary names; but, as Dr. Bowen had said, even for the convenience of classifying, some term for this class of cases is required. It is a condition which often confronts the general practitioner, and he naturally turns to the authorities for a name.

A Remarkable Case of Purpuric Eruption ending in Gangrene and apparently caused by Sodium Salicylate.*—DR. SHEPPERD, of Montreal, presented a paper on this subject.

DR. ELLIOT thought that it resulted from the administration of the sodium salicylate, and he did not think it a manifestation of peliosis rheumatica.

DR. BULKLEY never remembered a lesion of peliosis rheumatica where the lesion broke down, whereas in drug eruptions we have sloughing. In the absence of any other explanation he inclined toward the opinion that it was artificial and produced by the sodium salicylate.

DR. BRONSON thought the diagnosis should be a composite one, partly peliosis rheumatica modified by the use of the drug salicylate of sodium. Peliosis rheumatica never, as far as he knows, causes gangrene.

DR. ROBINSON was not prepared to state the cause, but did not think it a case of peliosis rheumatica, which he considered incapable of producing such a condition.

DR. GRAHAM thought it might be of a rheumatic character. Although the germ has never been isolated, we know that rheumatism is an infectious disease. Some of the most extraordinary symptoms result from it, profound nervous trouble, hyperpyrexia, etc. It is therefore possible that some such condition as this might be produced; or in conjunction with the rheumatism we might have some other nondetected organism present as a cause.

DR. WHITE said we have to consider the affections it most closely approaches, not what it is. One might think of three affections in connection

* Will be published in this Journal.

with these symptoms: 1. Peliosis rheumatica, but the distribution and outcome of the disease are entirely at variance with the affection. 2. Drug eruptions. As these have no bounds set to them, and our knowledge of them is at present very limited, it would be unwarrantable to conclude that they might be manifestations of salicylic-acid poisoning. Any of these cases of salicylic-acid irritation of the skin which he had seen never approached anything like this in severity. 3. The next affection to be considered is rare: hæmorrhagic form of dermatitis—dermatitis multiformis or herpetiformis. The early urticarial nature of the lesion, the vesicular, bullous, and hæmorrhagic varieties are all within the limits of this affection. The only objections against it are the gangrenous and necrotic condition at the end of the process. Were it not for the symptoms of synovitis, etc., preceding the exhibition of the drug, he would have been inclined to favor the drug as a cause of the eruption.

DR. MORROW thought it impossible to determine the precise ætiology of the eruption. He was inclined to look upon the sodium salicylate as the causal factor here, and the unusual character of the eruption as due to the peculiar constitution of the patient.

DR. ALLEN had seen some severe cases of eruption after salicylates in rheumatic patients, but never anything equal to this; still, he could hardly doubt the causal action of the drug.

DR. KLOTZ did not see that the presence of gangrene should exclude the possibility of peliosis rheumatica; we have hæmorrhage in the latter disease, and, given hæmorrhage, it is only a question of intensity whether or not gangrene will follow.

DR. SHEPHERD only began to doubt the sodium salicylate as a cause when he noticed crops of the eruption continuing to appear after the stoppage of the drug. Then the eruption was preceded by the rheumatic pains. Again, the eruption seemed to be incompatible with such a small quantity of the drug as had been given (only four doses, amounting to about eighty grains). He had never seen a case of peliosis rheumatica become gangrenous, but he quite agreed as to its only being a matter of intensity. Hutchison reported a case of purpura thrombica which resembled this one.

A Contribution to the Study of Mycetoma.*—By Dr. J. NEVINS HYDE, of Chicago.

DR. GRAHAM was much interested in this case, especially as Dr. Adami, of McGill University of Montreal, had shown a case of "Madura foot" at the last meeting of the Association of American Physicians in Washington, and he had no doubt that Dr. Hyde would be able to see the specimen and bones in the museum in Montreal. Prof. Adami made a very minute study of the pathological features. The patient, he believed, was a Canadian, who was never out of Canada.

DR. ELLIOT wished to know whether Dr. Hyde made an absolute distinction between the fungus that caused Madura foot and that recognized as the cause of actinomycosis.

DR. HYDE said he was not justified in drawing any conclusions so far from his observations on this case. But, from Indian observations and his own experience combined, he was inclined to think that there were

* Will be published in this Journal.

probably several varieties of the "ray fungus," and that the variety causing Madura foot was not identical with that causing actinomycosis. He thought there might be an American variety of the ray fungus which causes mycetoma.

DR. ELLIOT said his reason for asking was on account of a peculiar case of actinomycosis seen by him last winter. Altogether he had seen three cases of this disease; in the third the disease did not affect the jaw at all, but commenced primarily in the abdominal canal, a fistula in ano being the first skin symptom. There could be no doubt as to the identity of the disease, as he had made a pathological examination, and found the ray fungus abundant in the secretion. His other two cases were typical ones, affecting primarily the lower jaw. All these cases had that peculiar hardness around the situation of the wound or fistula which has always been signalized as characteristic. As far as he knows, in reading and hearing of Madura foot, this symptom is wanting.

Two Cases of an Unusual Papulo-pustular and Fungoid Bromide-of-Potassium Eruption in Babies.—DR. GEORGE T. ELLIOT, of New York, read a paper on this subject. The first child had been taking the sirup of the iodide of iron in large doses for its age for some weeks, when, upon the supervention of a bronchitis, the bromide of potassium was given. An erythematous rash, followed by a papulo pustular or acneiform eruption, had appeared while it had been taking the iodide of iron, and these latter lesions became exaggerated in character, fungoid in type, and covered with thick crusts very quickly after the bromide was given. The eruption continued cropping out and becoming severer in type until the drug was stopped. Retrogression of the lesions ensued rapidly, and in a short time the baby had recovered, only pigmented stains and superficial scars remaining.

The second case was also that of a baby who for bronchitis had received large doses of bromide of potassium. The administration of the drug had been followed by an outbreak of lesions similar to those which occurred in the first baby.

Attention was directed to the fact that the appearance of the bromide eruption in Case I had been preceded by an iodic one, due to the use of the sirup of the iodide of iron in large doses, and the gravity of the cutaneous manifestations was owing to this in part, as it is a well-known fact that a bromine following an iodine compound produces intensified results. The production, however, of iodic symptoms by the iodide of iron is a rare occurrence, and among unusual effects of bromine compounds bromide acne, the result of bromo-caffeine, hydrobromic acid, hydrobromate of quinine, and of conium, was mentioned by the author.

DR. JACKSON thought the cases belonged in the same class as the one he had reported.

DR. WHITE had noticed in several cases the irritant action of the iodide of iron. He also spoke of cases observed by him in which a fine papular eruption, almost exclusively of the face, affecting individual follicles, had followed the use of bromidia. The lesions rarely became suppurative.

DR. FORDYCE called attention to the chloral which bromidia contained as having a possible effect.

DR. HYDE had seen two eruptions caused by bromidia in which the hands were alone affected. There were large circinate plaques, pruriginous, and

having a crimson shade. The second case he had diagnosticated from its resemblance to the first.

DR. HARTZELL called attention to the eruption on the hands described by Mr. Hutchinson as due to chloral. He thought it likely that chloral was the drug at fault in bromidia.

DR. ELLIOT thought the effect of the bromine was the same, no matter what it was combined with. Müller had reported fungating growths and gangrenous ulcers after bromoform, a preparation much used in Germany. He had found in many instances that patients suffer for as long as six months after stoppage of the drug, especially from the acne form with rosacea and peculiar erythematous eruptions. There were not infrequent exceptions to the rule.

DR. BULKLEY suggested that the difference in Dr. Hyde's and Dr. White's cases might be due to the one being caused by the bromine, the other by the chloral, in the preparation.

DR. WHITE said he did not distinguish the lesions in his cases from any other form of bromide rashes.

DR. MORROW asked if the eruption which persisted so long was the same as that which first came out.

DR. ELLIOT said it was.

DR. KLOTZ had mentioned at the New York Dermatological Society last winter that he had seen eruptions following the iodide of iron.

An Ætiological Puzzle.—By DR. J. C. WHITE, of Boston. A tuberculosis of the skin of the hand was described in a young girl who had been accustomed to wash the handkerchiefs of a parent who died of phthisis. The patient was beginning to develop the same disease herself. Another case came to the clinic with characteristic tuberculosis of the lobes of both ears gradually coming on for eight years. The ears had remained long inflamed after piercing for earrings and never healed. The woman who bored the ears died soon after of consumption. The sister who dressed the ears died also of the same disease. The operator may have wet her needle or end of the silk in the mouth, or subsequent dressings may have caused the infection, or bacilli may have entered through the medium of the air. The puzzle is, which was the case?

DR. BRONSON thought any one of the many explanations offered by the reader might be the correct one.

DR. SHEPHERD thought the first explanation of wetting the fingers a correct one. We are all breathing bacilli continually; it was only those who were vulnerable that became affected.

DR. HARTZELL had seen a tubercular case of undoubted local infection. The child's father had recently died of consumption (three months previously); the lesions on the child were one at the metacarpal joint of the thumb, another upon the knee, and another upon the opposite leg; in fact, in just such situations as a child exposed to tubercular sputum could become infected when crawling over the floor.

DR. GRAHAM recounted the history of a case of a young lady patient of his, affected with phthisis; was nursed by her mother, who, contrary to instructions, washed the handkerchiefs, etc., used by her daughter in expectoration. She developed several tuberculous sores about the knuckles, and three or four months afterward also developed phthisis. She died within two years. He

often thought that the primary disease here developed in the hands, and that the condition of the lungs was secondary. He mentioned a case of tuberculosis extremely difficult to diagnose. The lymphatic glands over the whole body were affected, and the case had been mistaken for Hodgkin's disease. The only sign of tuberculosis was a peculiar form of ulceration that occurred over the glands in one or two cases. After death the glands were found to be tuberculous.

DR. KLOTZ related an account of a strong, healthy patient who came to him complaining of some sores that had originated in the bites of insects. He gave a history of having been in the Adirondacks in the vicinity of Saranac Lake, and while out hunting had become pretty badly bitten. Most of the bites healed, but a few did not, and increased of late in size. A small number of typical mucous nodules were to be seen. It looked as if the insect had inoculated him with some tubercular sputa.

DR. SHERWELL called attention to the fact of the high degree of exposure butchers, as a class, were subjected to in the way of tuberculosis, and yet he was not aware that they were more noted than those of other trades for being affected with this disease.

DR. WHITE found in his experience that butchers and autopsy makers were the most common subjects of lupus of the hands.

Studies on Some Dermatological Subjects.—By DR. A. R. ROBINSON, of New York.

The speaker referred first to a case of lymphangioma circumscriptum in a child, aged twelve, who had had the affection since infancy.

The plates which were demonstrated by the speaker showed (1) the scarring of an operation performed when the child was very young, (2) the spawn-like character of the lesions, (3) the presence of blood in some of the vesicles.

In his second case of the same disease, the plates showed (1) very extensive vesiculation, (2) a number of bloodlike cysts much smaller than the first case, (3) grouping not so well marked. No scars are to be seen in this case.

The third case of this disease was in a patient twenty-seven years of age. It existed from birth and new lesions had appeared within the last few months. One shows a scar from a caustic applied some years ago. The photographs were taken at different times—one shows the lesions as clear, the other as filled with blood. The patient's statement was that at each menstrual period the lesions became red from filling up with blood.

DR. WHITE wished to know if there were many recurrent attacks of dermatitis associated with these cases.

DR. ROBINSON had only seen the case during the past year, and never heard of any dermatitis occurring.

DR. WHITE thought this remarkable.

DR. ELLIOT wished to know of Dr. Robinson's success in treating these cases. His experience was that lesions destroyed were succeeded by fresh ones around the scars.

DR. ROBINSON did not attempt to treat some of the cases. In one he used caustics, but as he had not seen the patient since, he could not speak as to the results. The lesions had spread in two of the cases, especially in that of the neck.

DR. HARTZELL stated that in a case reported by him, the patchy lesions

seemed to move slowly over the shoulder; in other words, the part first affected was soon free, while the patch traveled upward.

DR. ROBINSON then took up his next series of cases of the disease called by some *dysidrosis*, supposing it to be connected with the sweat glands, by others pompholyx or cheiro-pompholyx, while others did not consider it at all a special disease, but a form of eczema. He wished to discuss the relative correctness of these different names for the condition.

He thought the lesions bore no resemblance whatever to eczema. He first showed a drawing of a hand, the history of which case is found in the *System of Dermatology*, etc., edited by Dr. Morrow. The lesions on the palms of the hands and soles of the feet, always coming out simultaneously and in regular groups; the formation of vesicles and bullæ which show no tendency to rupture; their faculty of passing away in a few weeks, and of easily coming back again by unusual exertion, all contraindicate a diagnosis of eczema. The second case, the plate of which he passed around, was that of a little girl about twelve years of age in whom the lesions also appeared on the palms and soles in a very marked manner. This also showed the same characteristics as the others: the grouping, the tendency of the vesicles and bullæ to run together, at first being clear and afterward more yellowish, and disappearing after a certain length of time, and leaving no signs of dermatitis, or eczematous condition. He showed a drawing of the lesions on the foot which represented the very large variety, and he thought that a consideration of this picture alone ought to convince any one that at least here we have not an eczematous condition. The contents of the vesicles were invariably alkaline. He wished to lay particular stress on the distinction between this disease and eczema, for the reason that he understood Kaposi had within the last two or three years shown in his clinic certain cases of vesicular lesions with acid reaction, and described them as the kind of cases which the American doctors were wont to call dysidrosis or pompholyx.

Relative to the propriety of the name dysidrosis, as implying a connection with the sweat glands, he had never seen anything in his microscopical examinations to warrant us connecting them with these glands. The experience of all other observers who had worked upon this subject had been similar, none of them, as far as he knows, having found the lesions in any way connected with the sweat glands. If this be true, it follows, of course, that the name dysidrosis is a wrong one. He preferred to call the affection cheiro-pompholyx.

Another case was reported in which, histologically, there was no connection at all with the sweat glands.

DR. ELLIOT thought there could be no question about dysidrosis or pompholyx being an entirely distinct affection from eczema. The speaker, however, wished to learn why Dr. Robinson called these lesions, when they occurred on the hands and soles, cheiro-pompholyx, and having no connection with the sweat glands; whereas when they occurred on the face he called them hidrocystoma, and connected with the sweat glands. He had seen a number of these cases, originating from exposure to heat, in people of run-down constitutions and severe nervous prostration. The eruptions which have come out upon the palms of the hands, sides of the fingers—in deep-seated lesions without any redness around them—resembled absolutely those sago-grain lesions spoken of, with a certain amount of itching, the

lesions persisting for a certain length of time and their places being taken by new ones, and corresponding in every particular with the lesions of hidrocystoma of the face. He did not see, therefore, why in the case of the palms and soles they should not be connected with the sweat glands, while in the face they were.

DR. HARTZELL desired to know if there were any subjective sensations connected with these cases. So far as his observation went, pain was a distinct feature in contradistinction to the itching and burning so characteristic of eczema.

DR. BRONSON could testify as to the absolute distinctness of one of these cases from any form of eczema that he had ever seen. He examined into the reaction and satisfied himself that the reaction of the vesicular fluid was alkaline, while that of the sweat in the same locality was acid.

DR. BULKLEY thought there was undoubtedly a bullous eruption of the palms, which is purely a nervous affection, which he did not regard as a dysidrosis. At the same time he always recognized hidrocystoma of the face, and also certain cases which occurred in warm weather on the palms of the hands, etc., which, so far as clinical appearances go, appear to be a dysidrosis. On the other hand, he thought there were many cases of vesicular eczema of the palms which so closely resemble this condition that, when aborted by treatment, he could understand would be very difficult to distinguish from dysidrosis. He would therefore wish to put himself on record as believing in dysidrosis, a bullous eruption more properly called hydroa, and in an eczematous eruption resembling this.

DR. KLOTZ had seen some cases, such as those described by Dr. Elliot, but none of them had such large bullæ as those seen in the pictures. These patients had no pain and very little itching. He did not feel disposed to lay too much stress upon the reaction of the contents of the vesicles; as there is some reason to believe that sweat, which at first was of an acid reaction, after remaining a certain length of time in the gland becomes alkaline.

DR. WHITE said if we were to eliminate the bullous or confluent eruptions, as shown in the photographs, or to take one or two of the smaller lesions, it would be impossible to diagnose these cases from vesicular eczema of the hands. However, he believed there were two affections of this nature of the hand, the first undoubtedly dysidrosis, the second might be called eczema.

DR. SHEPHERD thought the eruption of pompholyx was quite distinct from that of eczema. The first case he had seen was in Mr. Hutchinson's clinic twenty years ago. It occurred in a stewardess who came from Australia. She never had the disease except when she came to London. He himself had seen two cases in medical students, caused by overwork and worry about examination times; one of these had it, at the same period, for three successive years. The speaker therefore thought pompholyx a disease entirely different both as to symptoms and pathology from eczema.

DR. ROBINSON, in reply to Dr. Elliot, said he had never seen any eruption upon the palms similar to hidrocystoma of the face. It was only the grouped lesions that should be called pompholyx. Besides, the symptoms were different: in pompholyx there is a burning sensation and a great deal of pain; whereas, in obstruction to sweat, as observed upon the face, there are no subjective sensations. Again, the lesions of excessive sweating may be chiefly,

but are never solely, confined to the palms, but are found on other parts of the body.

DR. ELLIOT said the lesions he referred to were those described by Dr. Tilbury Fox as sago-grain vesicles, and which description Dr. Robinson had some time ago started in to disprove. His question was, why Dr. Robinson proposed calling these sago-grain lesions occurring on the face hidrocystoma and connected with the sweat glands, but when occurring on the palms cheiro-pompholyx, and having no connection with the sweat glands. It was this seeming inconsistency he wished explained.

DR. ROBINSON replied that Dr. Tilbury Fox made out a relationship to the sweat glands. These sections were afterward carefully examined by Hogan and others, who could find no connection between the lesions and the sweat glands; and finally Crocker, in his last book, renounced the old view, and no longer calls the disease dysidrosis. The cases which Fox called dysidrosis the speaker called pompholyx. In reference to the similarity of the lesions between hidrocystoma and pompholyx, he could only repeat that if the lesions are grouped, symmetrical, not acuminate, confined to the palms or between the fingers, then they constituted the disease called dysidrosis by Fox, and which he proposed calling cheiro-pompholyx. If they are not such lesions then they are eczematous. The lesions of hidrocystoma of the face have acid contents, those of cheiro-pompholyx always alkaline. In hidrocystoma he had never seen any signs of inflammation; in cheiro-pompholyx there is decided evidence of inflammation. Furthermore, in hidrocystoma the lesions disappear slowly in the course of a few weeks. In pompholyx the macerated cuticle exfoliates, leaving a tender surface behind.

DR. WHITE asked whether Dr. Robinson considered these small lesions on the palms as inflammatory or noninflammatory? Or was he to understand that the only difference between the vesicles in the two diseases (eczema and pompholyx) was that the one does not rupture, and is more or less pointed?

DR. ROBINSON said: You may get very similar lesions in eczema, but they will not be grouped lesions, be symmetrical, have a duration of say about two weeks and then disappear, leaving some slight reddening of the surface behind.

DR. ZEISLER thought Dr. Robinson's contention that the vesicles in pompholyx do not rupture as easily as those of eczema might be due to their situation. Vesicles on the palm are hard to rupture. If Dr. Robinson is not already aware of the fact, he might inform him that his picture with the large bullæ is identical with the disease described by Köbner as epidermolysis bullosa.

DR. ELLIOT thought Goldscheider was prior to Köbner in the description of epidermolysis bullosa, but these cases were always characterized by being congenital. As a distinction between eczema and pompholyx, the secretions of the former stiffen linen, those of the latter never.

DR. ROBINSON showed sections of the skin in a case in which the skin proper was normal, but there was marked degeneration of the parenchymatous portion of the sweat gland, exactly similar to that seen in the kidney. He exhibited a sketch of the excretory duct, showing three albuminous casts in it. Albuminous and granular matters were observed in the coil as well as in the excretory duct. In cases of bromine and iodine rashes it might be well to study the condition of these glands, as he thought it likely they

might be found to be the seat of the earliest stages of these lesions. The casts shown lying in the excretory duct in the sketch passed around he considered unique.

DR. SHERWELL desired to know, in view of the vicarious capability for action in the kidneys, whether the urine had been examined in this case, to ascertain if any relationship existed between the kidneys and the pathological condition in the sweat glands.

DR. ROBINSON replied that the urine had not been examined. He described an indefinite eruption, which was not eczema, not pompholyx, not dysidrosis, not sudamina, but a medullary or parenchymatous inflammation of the coil in the sweat glands, and lesions on the skin which consisted of vesicles or small bullæ, caused by an exudation passing from the sweat glands into the corium and separating the rete.

(To be continued.)

THE NEW YORK DERMATOLOGICAL SOCIETY.

244TH REGULAR MEETING, HELD ON TUESDAY EVENING, MAY 21, 1895.

DR. H. G. KLOTZ, *President, in the Chair.*

A Case for Diagnosis.—Presented by DR. C. W. ALLEN.

The patient was a man aged seventy-six years, a physician. Two months ago a lesion appeared on the abdomen which was like a small abscess, possibly a furuncle; a similar lesion appeared about the same time on the shoulder, and one on the upper lip. All the lesions healed under simple treatment with the exception of the one on the lip, which took the form of a rounded tumor about the size of the end of a man's thumb, and had a few small openings through which pus exuded on pressure. It had also a number of long papillæ attached by a slender base; after applying acetic acid to the latter, these were cut off. At this time Dr. Lustgarten saw the case in consultation, and while he agreed with Dr. Allen that the lesion did not resemble epithelioma, he thought that possibility should not be lost sight of, and advised a lotion of resorcin and applications of salicylic-acid plaster. A piece of the growth was then submitted to Dr. Biggs for microscopical examination, who reported that while there was marked proliferation of the surface layers of the epithelium, it did not extend into the deeper layers of the skin. He advised its removal, however, stating that such proliferating epithelial growths are always a source of danger if left, even if they are originally benign.

As the lesion still failed to improve, Dr. Allen said he applied caustic potash, burning away the entire mass. Five or six days ago his attention was called by the patient to a new growth on the inner surface of the right cheek; clinically, this has the appearance of a warty growth with a hard base. It is on the opposite side of the face to the lesion on the lip, and has no connection with it. There are no glandular enlargements. The man states that he has been subject to carbuncles.

DR. MORROW said that he was disposed to regard the lesion on the lip as an epithelioma. As regards the lesion inside the mouth, there was possibly

a specific element in it. It was unusual for epithelioma to develop in that particular location, and it was also unusual for that disease to present multiple lesions in the beginning. He did not care to venture a positive diagnosis without a more thorough examination.

DR. CUTLER said he was inclined to regard the case as one of syphilis. It would be very unusual for a case of epithelioma to develop as rapidly as this one had.

DR. JACKSON said that while the history of the case rather militated against epithelioma, still he was rather inclined toward that diagnosis. In a case which came under his observation about two years ago the patient presented a lesion on the face and subsequently one inside the mouth. In view of the fact that the man gave a straight history of having had syphilis in times past, he was put on specific treatment, but no improvement followed. A microscopical examination was then made, which showed the case to be one of epithelioma.

DR. BRONSON said he did not care to venture a diagnosis. He saw no evidences of syphilis. There was simply a fungating mass, such as we see in other diseases besides syphilis. Even if epithelioma finally developed in this case, that would not prove that the original lesion was of that nature.

DR. LUSTGARTEN said he did not think the case answered to any of the well-known clinical types of either syphilis or epithelioma. The lesions were probably due to some infection of an unusual nature, and only a very careful microscopical examination would be able to help us.

DR. KLOTZ said it would be difficult to class the case among any of the lesions of syphilis, as they usually occur.

DR. ALLEN said he had carefully observed the case from day to day for about ten days. He had come to the conclusion that clinically it was not epithelioma; also, that clinically it was not syphilis. He inquired as to the best method of treating the lesion in the mouth.

DR. LUSTGARTEN suggested the use of the Paquelin cautery.

DR. SHERWELL advised the use of the acid nitrate of mercury, first plugging up the rest of the mouth with cotton wool and then applying it to the lesion. After sufficient escharotic action has been obtained, the drug can be neutralized with a saturated solution of bicarbonate of soda.

DR. MORROW stated that while the acid nitrate of mercury had an extraordinary escharotic power, it was extremely painful and it was difficult to control its action. When using it he applied sheets of blotting paper to protect the neighboring parts and absorb the excess.

DR. DANIEL LEWIS expressed the opinion that the terchloride of antimony is as efficient as the acid nitrate of mercury, while it has not the same tendency to spread and is not painful. He uses the full-strength drug, applying it by means of a glass marking pen. No neutralizing application is required after its use.

DR. KLOTZ stated that the liquor ferri perchloridi is a mild but very efficacious application in many of the cases.

DR. LEWIS, in reply to a question as to the value of protonuclein in lupus, stated that in one case under his observation, a woman with extensive cancerous lesions of the face, which began as lupus twelve years ago, extirpation of the eyeball was performed; recurrence of the disease appeared in the socket, and about three months ago the use of protonuclein was commenced.

Thus far its effect has simply been to produce a somewhat healthy-looking granular surface, which bleeds readily ; the wound shows no tendency to heal, and there is new infiltration around the borders. It has not modified the progress of the cancerous disease one atom.

DR. FOX said he has at present under his observation a case of lupus which is being treated by means of injections of protonuclein, thus far without beneficial effect. The injections are rather painful and excite some inflammation.

A Probable Case of Mixed Infection: Syphilis and Lupus.—Presented by DR. LUSTGARTEN.

The patient was a young woman who five years ago had an ulceration of the throat which lasted for some time, destroying the uvula and a portion of the soft palate. Two years ago the ulcerative process extended to the nose, destroying the tip of that organ, as well as the entire cartilaginous and a portion of the bony septum. When the patient first came under Dr. Lustgarten's observation, about nine months ago, the ulceration was gradually spreading. It strongly suggested syphilis, and yet there were a number of soft, fungating masses which were suspicious of lupus. Under vigorous specific treatment the ulcerative process was checked, but the soft, granulating masses remained. These were scraped and touched with the Paquelin cautery, followed by several applications of a ten-per-cent pyrogallic-acid salve. This produced a cure, and the woman has now been entirely free from recurrence for five or six months. Dr. Lustgarten said that in this case we probably had to deal with a mixed form of infection, syphilis being complicated with lupus. By means of an artificial nasal septum made by Dr. Tetamore the woman's appearance has been greatly improved.

DR. ALLEN said he regarded Dr. Lustgarten's diagnosis quite tenable. There are cases in which such a combination occurs, and, judging by the way this one has acted under treatment, it is quite possible that it belongs to that class. The effect obtained from the artificial septum was admirable.

DR. JACKSON said he saw the patient at the Presbyterian Hospital last fall and diagnosed the case as one of syphilis. At that time there were no lupous nodules. While the patient was under observation there she developed a beautiful picture of the frambœsial form of syphilide. Dr. W. K. Simpson, who saw the case at that time, found typical syphilitic ulcerations in the posterior nares. When the patient was at the hospital scrapings from the nose were examined by the pathologist, who failed to find any traces of tuberculosis.

DR. LUSTGARTEN said we do not, as a rule, find tubercle bacilli in lupous secretions or even in sections, unless extraordinary pains are taken.

Lupus and Syphilis.—DR. BRONSON reported the following case, which is at present under his observation:

The patient is a young girl, eighteen years old, who has had ulcerations of the face for twelve years. During that period they have been more or less confined to the same localities, which is rather unusual in syphilis. There is a deep ulceration on the nose and another one inside the cheek. Large brownish-colored lesions also occupy the upper and lower lip, and there are extensive ulcerations of long standing in the throat. On the arms there are well-marked cicatrices, showing the locations of former lesions. The girl has no other symptoms pointing to syphilis, either inherited or acquired, but

Dr. Bronson said he has come to the conclusion that there must be an element of syphilis in the case, as well as of lupus. Various methods of treatment have been employed, including escharotics and antisyphilitics, and the patient is gradually improving.

A Case of Dermatitis Herpetiformis.—Presented by DR. CUTLER.

The patient was a male, aged forty-six years, a native of Scotland. He had never suffered from any venereal disease, and was well up to eight years ago. About that time a group of vesicles appeared on the back, which were itchy and lasted about a month. Within a few months they reappeared, lasting longer, and extending to the face, neck, and arms. Following this he had frequent similar attacks, the intervals between them gradually shortening, and during the past year the eruption has never entirely disappeared, although it is better at times. At the present time the man presents groups of vesicles in all stages of development on the chest, arms, neck, and face, and a few on the thigh. He is gradually losing flesh and strength, and is suffering from cirrhosis of the liver, with ascites, for which he has twice been tapped.

DR. FOX regarded the case as a very remarkable one of dermatitis herpetiformis.

DRS. LUSTGARTEN and ALLEN said they agreed with the diagnosis.

Report of Cases presented at Previous Meetings.—DR. SHERWELL reported that the two patients suffering from anæsthetic leprosy, who were presented at the last meeting, have not been segregated by the Brooklyn health authorities.

DR. FOX reported that the young colored woman with an extensive lesion of the nose, whom he presented several months ago as a probable case of tubercular syphilide, has failed to improve permanently under specific treatment; lately the lesion has grown much worse, and he now admits the case to be one of lupus. Dr. Fox also stated that his case of pityriasis circinata, with well-marked circles on the back and thigh, which he presented two months ago, has been discharged, cured. The eruption seems to have run its course, some of the lesions getting well under sulphur ointment, and others disappearing spontaneously. His case of favus of the body has also been discharged, apparently cured. The crusts were removed by water dressings, and then mercurial plaster was applied to some of the lesions and a five-percent salicylic-acid ointment to the rest.

DR. CUTLER reported that the case of prurigo which had been presented by Dr. Fox several months ago has recently been under treatment at the New York Dispensary, and has recovered entirely under large doses of jaborandi. Externally, he employed sulphur ointment and balsam of Peru.

DR. SHERWELL reported the following case, which recently came under his observation: The patient was a boy, aged twelve years; excepting chicken pox, he had suffered from most of the diseases incident to childhood. Early during the present month he was taken sick with a slight fever (which never exceeded 101.5°), and a papular eruption made its appearance on the upper limbs and about the nose and ears, and to a limited extent over other regions. Three days later many of the papules were transformed into vesicles, and became surrounded with a bright reddish areola. When Dr. Sherwell first saw the case, which was about three days after the appearance of the eruption, most of the lesions had assumed a distinct purpuric appearance.

He regarded the case as one of varicella, possibly varicella gangrenosa. The boy suffered a good deal from anorexia and vomiting, and his temperature was almost constantly subnormal. Upon several occasions he passed considerable blood at stool. After this he gradually sank, and died on the fifteenth day of his illness. Dr. Sherwell said he regarded the case as one of varicella, complicated by purpura.

DR. LUSTGARTEN said that some of the varieties of purpura act very much like the acute infectious diseases. The temperature is usually low and the pulse rapid. He has seen two cases of purpura in which there was a formation of vesicular lesions.

DR. MORROW called attention to the fact that in Dr. Sherwell's case the vesicles preceded the purpuric eruption.

DR. LUSTGARTEN said he had never seen a case of purpura in which the vesicles were the primary lesions.

DR. ALLEN referred to a case in which there was a purpuric eruption on the body followed by a noma on the interior of the cheek, which perforated and caused rapid death.

DR. ALLEN exhibited a needle which he had found very serviceable in removing warts and moles by electrolysis. It differs from the ordinary needle in being flat; it is introduced through the base of the growth, and by making pressure laterally, first on one side and then on the other, the latter is removed with very little pain and at a single sitting, instead of waiting for the shriveled growth to fall off.

DR. FOX said he did not think this instrument possessed much advantage over the ordinary round needle, which, by means of a little lateral pressure, would accomplish about the same result.

DR. BRONSON reported the death of the leper Evans at the City Hospital. The patient had been in comparatively good health during the past year. About a week ago he was taken with colicky pains during the night, and on the following morning his temperature was 106° F. A physical examination showed slight evidences of inflammation at the base of one lung, but hardly sufficient to account for his fever. The next day the temperature ranged from 103° to 106° and the man died in delirium that night. At the autopsy a small area of pneumonic consolidation was found, but not sufficient to account for his death. All the other organs were normal.

DR. ALLEN said that death from leprosy sometimes closely simulates that in pneumonia. He had seen one such case; the patient appeared to have pneumonia, he had a high fever, and died in delirium. At the autopsy marked congestion of the lungs was found, but very little consolidation. It was a question whether the latter was leprosy or true pneumonic in character.

DR. LUSTGARTEN suggested that the temperature was due to septicæmia, which may arise from even a slight pneumonia.

DR. FOX said that in one case of mild macular leprosy under his observation the patient complained suddenly of dyspnoea and died. There had been a slight amount of albumin in the urine. There had been no signs of pneumonia. No autopsy was made.

DR. MORROW said that in most instances lepers die from enteritis or blood complications producing a gradual condition of marasmus. Coincident with the fatal symptoms, there are certain changes in the appearance of the tubercles or ulcerations, which may blacken or dry up.

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Original Communications.

THE EPITRICHIAL LAYER OF THE EPIDERMIS AND ITS RELATIONSHIP TO ICHTHYOSIS CONGENITA.*

By JOHN T. BOWEN, M. D.,
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IT is my object in this brief communication to call the notice of the association to a well-marked layer of cells found in the epidermis of young embryos, which has been observed and described as forming a distinct membrane covering the hairs in certain of the lower animals. Welcker, of Halle, was the first to describe this layer. He found in an embryo of a sloth a distinct outer membrane covering the hair development of the animal. To this he gave the name *epitrichium*, on account of its position overlying the hairs. He further found that this existed as a distinct membrane in certain mammals, while in others, where there was no separable membrane, the upper cells of the ectoderm were different histologically from the cells below.

He reserves the name *epitrichium*, therefore, for the separable membrane found only in certain mammals; the outer layer of histologically distinct cells found in certain other mammals, and evidently homologous with the *epitrichium*, is called the *epitrichial layer*. In man, he describes distinctly an *epitrichial layer*, consisting of large cells with round nuclei much larger than those of the epidermal layers beneath.

This *epitrichial layer* in man has not received recognition. Kölliker states that it is not proved that there is a distinct difference histologically between the outer cells and those beneath, nor that it is these

* Read at the nineteenth annual meeting of the American Dermatological Association, Montreal, Canada, September, 1895.

outer cells alone that are cast off. Welcker's *epitrichium*, however, meaning by this the distinctly separable membrane of certain animals, has been generally accepted.

My attention was directed to this subject in 1887 by Dr. C. S. Minot, who had seen in shreds of foetal skin, when stained by carmine or hæmatoxylin and examined with outer surface uppermost, a layer of large cells of polygonal form with a granular body in the center, and within this a nucleolus. He considered these cells to be part of the epitrichial layer described by Welcker in 1864, and since forgotten.

During the following two years I spent much time in investigating this question, and the results of my work were embodied in an article in the *Anatomischer Anzeiger* for 1889. As this journal is one not commonly read by dermatologists unless especially interested in some anatomical subject, and as I think the persistence of this epitrichial layer may play some part in the ætiology of certain affections of the skin, I take the liberty of briefly reviewing some of the conclusions that I arrived at in the article referred to.

It was found that in embryos of from two to three months, the epidermis possessed an outermost layer of large polygonal cells, granular in appearance and with large nuclei. Moreover, the shape of these cells was peculiar, many of them having a rounded, puffed-out, or "domed" appearance. These cells I considered to be the outermost layer of polygonal cells that are seen in the two-celled period of epidermal development, these outer cells persisting and becoming transformed into the domed cells, while beneath them the other mucous layers are formed. In embryos of from three to four months there were seen two rows of outer granular cells, many of them having a puffed-out, bladderlike appearance, so that they may be called bladder cells. A very large number of embryos (fifty at the least) were examined for these cells, and bits of skin were taken from many different parts of the body. In all parts these peculiar cells were found. They were more numerous in the best preserved specimens and when the sections were carefully handled. It was found that in the sixth month this layer had disappeared over most parts of the body.

It was held that there were good reasons for considering these cells as forming a definite and distinct histological layer. They differed greatly in size, form, and general appearance from the cells of the mucous layers below. They were very unlike the cells of the later horny layer, which is produced solely from the mucous layer, the epitrichial layer, at least on most parts of the body, not being concerned in its production. When the horny layer has made its appearance, the epitrichial layer has disappeared, with the exception of a few clumps

of bladder cells seen sticking to the scales. The close resemblance of this layer of cells to the elements comprising the epitrichium that covers the hair of certain animals and the epitrichial layer of certain other animals, points forcibly to the conclusion that they are homologous structures. Moreover, the partially horny tissue that covers the fœtal nail, and that has been named by Unna the *eponychium*, is evidently a part of the epitrichial layer, as one can trace a direct connection between the eponychium and the domed and bladder cells that have been described. In embryos of five months, after the nail has become exposed by the loss of the epitrichial layer over most of the surface, a heaping up of horny cells is found at the nail edge, forming a thick ridge. This is produced by a persistence of the epitrichial layer at this point and by a keratosis of the bladder cells; the horny formation not, in my opinion, being derived from the mucous layers, as is the stratum corneum.

At the time these investigations were made my attention was naturally directed to the question whether any known epidermal anomalies were to be explained by the persistence of the epitrichial layer after birth, and the class of cases that has been described under the title of "*ichthyosis congenita*" suggested themselves at the outset. No example of this condition had, however, fallen under my observation, and the cases reported varied so greatly in degree, and were so variously interpreted by different writers, that speculation as to their ætiology seemed worse than useless. In the summer of 1892, however, a case was brought to me that at once suggested the persistence of this embryonic epitrichial layer at the time of birth. The patient was a male, seven months of age. The skin of the trunk, legs, and arms was thickened slightly, and scaling moderately in rather large flakes, especially upon the back. The skin of the legs was comparatively normal. There was considerable scaling and thickening of the scalp, especially of the occiput. The father and mother were both healthy, and had previously had five healthy children, and no family history of importance could be elicited. The parents' account of the condition of the child's skin at birth was corroborated by the physician who had been in attendance, Dr. Bacon, of Brockton. Dr. Bacon said that when the child was born there seemed to be a thin, perfectly smooth membrane covering it completely from head to foot, which was not detached, but closely adherent to the underlying tissues. In smoothness and in appearance this membrane suggested paraffin paper. It was five weeks before much of this membrane was lost, when it began to peel off in large strips—not in the form of branny scales. The skin underneath the membrane looked normal, but a process of slow scaling had been

going on after the membrane had peeled off, which was diminishing gradually when the patient was seen by me. According to the attending physician, there had been no ectropion, and no deep fissures and cracks in the skin such as are described in many recorded cases of ichthyosis congenita.

It was afterward learned that the child died of diphtheria in January, 1893, and that before the attack of diphtheria the skin had become almost normal and the health was very good.

There seemed to be good ground for the assumption that this cutaneous phenomenon was due to the persistence of the epitrichial layer, which had preserved its integrity up to the time of birth, instead of being cast off by the seventh month, as in the normal fœtus. Whether this case was to be classified as a mild, attenuated form of the disease described as ichthyosis congenita or ichthyosis fœtalis, it was impossible for me to determine with the data at hand.

At a meeting of the Société de Dermatologie et de Syphiligraphie in January, 1892, Hallopeau and Watelet reported a case which they described as an attenuated form of the disease called fœtal ichthyosis. In this case the infant was seen by one of the reporters a quarter of an hour after birth, when the whole surface of the body was found to be covered with a white pellicle, so that one might have thought it thickly strewn with rice powder. Fifteen minutes later this pellicle became broken in places, especially at the flexures of the joints, and began to separate in large sheets. There was some ectropion. When this outer pellicle had been cast off, the skin beneath was seen to be reddened, and a mild exfoliation in the form of fine branny scales, unlike the large pieces that were formed by the breaking up of the pellicle, persisted for some time. The pellicle is compared to a layer of collodion that had been applied to the surface of the skin, and had broken at various points. The general condition of the infant was good.

This case was regarded by the reporters as an attenuated form of ichthyosis congenita, despite the marked difference from the severe cutaneous alterations that had previously been observed in this affection. Opinion was divided among the other members of the society, several, among them Besnier, declaring that if the conception of the term ichthyosis were properly held to, it would occur to no dermatologist to place this case under that heading.

At a later meeting of the society a letter from Kaposi was read, in which he calls attention to the plate in Hebra's atlas called ichthyosis sebacea, which seems to him analogous to the case described by Hallopeau, while the graver cases of ichthyosis congenita described by

Kyber, Hans Hebra, and others, he seems inclined to group by themselves.

In the *Annales de dermatologie et de syphiligraphie* for February, 1895, there appeared an interesting and suggestive article by Grass and Török upon a case of lamellated exfoliation of the newborn or the ichthyosis sebacea of Hebra. In this case the child, seen twenty-four hours after birth, looked as if covered with a thin layer of collodion, which was broken in places by fissures extending no deeper than the membrane itself. This covering was adherent in all parts except at the seat of the fissures, and here the skin deprived of the membrane appeared normal. The child died three days later from an intrameningeal hæmorrhage due to the application of the forceps.

Grass and Török, in their discussion of this case, assume its analogy to the ichthyosis sebacea as pictured by Hebra, and plead for the separation of these cases from the severe forms of diffuse keratoma described as ichthyosis congenita or fœtalis. Moreover, what is of especial interest, they refer to Welcker's epitrichium, or the distinct membrane covering the hairs of certain animals, and assume that in cases like their own and in all cases of "ichthyosis sebacea" the cells of the stratum corneum possess a greater coherence than usual, which results in the formation of an envelope completely analogous to the epitrichium of certain animals. This condition they regard as in no sense pathological; it is simply a variety of the physiological desquamation of the newborn.

Kaposi's view, that ichthyosis sebacea (which they assume to be the same condition as the case described by them) is caused by the sebaceous excretion continuing for a longer or shorter period after birth, and finally drying up and being cast off in the form of scales, is proved by microscopical examination to be erroneous, as no fat was found in bits of the membrane except at the mouths of the sebaceous glands. Ichthyosis congenita in the severe forms described by Kyber, Hebra, and in America by Elliot and Sherwell, they consider, as has been said, a totally distinct affection, as well as the ordinary ichthyosis. They propose to call the affection represented by their case "exfoliation lamelleuse des nouveau-nés," as in accord with the anatomical evolution of the process.

It seems to me that Grass and Török have done much toward clearing up this matter, and that in all probability different affections have been described as ichthyosis congenita. Whether all the cases called ichthyosis sebacea by the Vienna school are identical with Hallopeau's and Grass and Török's case it is impossible to say. Certainly the Hebra plate of ichthyosis sebacea is not inconsistent with such an as-

sumption. The prominence given to the seborrhœal element in such cases has added much to the confusion, as it is not shown that the scales and concretions are made up to any considerable extent of sebaceous matter—all the evidence points to the outer epidermal cells as solely responsible for the pathological condition.

Now, it can scarcely be questioned that the three cases just described—viz., Hallopeau's, Grass and Török's, and my own—represent the same pathological process. In all the child was born with a membranous covering which impressed the observers with its similarity to a layer of collodion or of oiled paper. After a short time this membrane began to peel off in large masses and sheets, leaving the normal skin below in a state of moderate desquamation, which slowly subsided. The health of these children was not visibly affected by the abnormality of the skin.

These three cases at least are to be grouped together, and are examples, in my opinion, of a persistence of the epitrichial layer, which has usually been cast off by the seventh foetal month, but in these instances maintained its integrity up to the time of birth, when it enveloped the infants like a distinct membrane, such as is found in certain animals. Whether some of the other cases heretofore described under *ichthyosis congenita* may belong in this category and are due to the persistence of the epitrichial layer, it is difficult to form an opinion. There is the widest divergence in the clinical appearances found in the advanced cases of so-called congenital or foetal *ichthyosis* and the three cases that I refer to. In these advanced cases of foetal *ichthyosis* Kyber's name of universal diffuse keratoma seems justified. His histological studies showed a great proliferation of the cells of the rete and a correspondingly increased cornification of the upper cells, together with an enlargement of the interpapillary rete prolongations and of the sweat glands. Such cases can not certainly be explained by the persistence of a foetal layer merely, but it may be that these outer cells are subject to pathological changes *in utero*, which play a part in the resulting deformity.

Grass and Török say that in all cases where the newborn child is covered with a horny layer, in process of slow detachment in large masses, we must assume a stronger coherence of the horny cells, which causes the formation of a horny envelope analogous to the epitrichium of certain animals. They consider this a variety of the physiological desquamation of the newborn and in no sense pathological. In other words, the membranous outer envelope is produced by a persistence of the scales of the horny layer proper, which are usually cast off gradually before and after birth.

It will be seen, from what has been said at the beginning of this article, that Grass and Török's view is probably not quite the true one, for it has been shown that there is in man an *epitrichial layer* which is at all times above and histologically different from the horny layer. As the epitrichial layer disappears by the seventh month, the normal desquamation of the last few months of foetal life and of the newborn child is produced from the true horny layer. In the instances where the child is born with a covering or envelope composed of horny cells, as in the cases of Hallopeau, Grass and Török, and in my own, a rational explanation is that in these cases the epitrichial layer, instead of gradually exfoliating and disappearing by the seventh foetal month, retains its integrity up to the time of birth, when the child is born covered with a membrane completely analogous to the epitrichium of some animals. Beneath this membrane lies the true horny layer which desquamates in small scales after its outer covering has been removed.

CATHETERIZATION OF THE URETERS IN THE MALE.

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FOR many years it has been the aim of those interested in medical science to discover some method by which the exact condition of the kidney could be ascertained. Judging from the urine passed by the patient, it was often impossible to tell whether the disease was in the urethra, bladder, or kidney. If the trouble were located in the kidney, the questions at once arose: "Which kidney is affected? Is one kidney normal, or are both diseased?"

Before the advances of modern surgery the answers had a value on prognosis only; the treatment would probably have been the same under any circumstances. The catheterization of the ureters, the only method which could give a positive knowledge of the condition of each kidney, was believed to be impossible in the male. Many plans, varying in ingenuity and value, were suggested as a substitute for this operation. It was even attempted to compress one ureter by pressure on the abdomen, and then assume that the urine drawn from the bladder, which had been previously emptied, came from the opposite kidney. But as it could not be proved that one kidney had been completely shut off, the results obtained were of little value. To-day, with the steadily diminishing death rate following nephrotomy and nephrectomy in properly selected cases, every conscientious surgeon should

be confident of his position before any operation on the kidney is undertaken. The advances in electrical science have placed means at our command which could never have been thought of twenty-five years ago. The invention of the cystoscope by Nitze in 1879 gave the opportunity for the positive diagnosis of vesical and renal diseases. By finding the ureters and watching the jets of urine it was possible to estimate comparatively the amount secreted by each kidney and to discover renal hæmaturia. In 1888 Brenner suggested that a cannula should be placed along the inferior portion of the cystoscope for the purpose of changing the fluid in the bladder without removing the instrument. Through this cannula he attempted to catheterize the ureters in the male, without success. The late Dr. James Brown, of the Johns Hopkins Hospital, performed this operation successfully on June 9, 1893, using the Nitze-Leiter cystoscope with Brenner's modification (*Johns Hopkins Hospital Bulletin*, September, 1893). He met with many discouragements while perfecting the catheter, stylets, etc., but by his indomitable persistence finally achieved the success he merited.

The methods here given are those introduced and practiced by the late Dr. Brown.

The shaft of the cystoscope used is elliptical, having a circumference equal to a No. 28 F. sound. The vesical end of the cannula comes down flush at the curve of the beak; the outer end is separate from the shaft, curving downward when the cystoscope is in position in the bladder. The operating table should be ninety-two centimetres high, with an extension on the top forty-five centimetres wide, projecting forty centimetres. The patient lies on his back, with his buttocks on the end of the projecting board, the legs being widely separated and resting on stools sixty-four centimetres high.

This allows the operator room for his knees, as he sits on a stool, which can be adjusted to any height desired, in order to bring the eye on a level with the cystoscope.

Both the surgeon and the patient should be in a comfortable position, for the instrument must be held perfectly steady in searching for the ureter, and, after the catheter has been introduced, while waiting for the urine to be secreted and collected.

The urethra having been irrigated with a 1-to-40,000 bichloride-of-mercury solution, two cubic centimetres of a four-per-cent solution of cocaine are injected into the deep urethra, and four cubic centimetres into the anterior. As a rule, cocaine gives satisfactory anæsthesia, but it is sometimes necessary to use ether or chloroform. In one case that could not be catheterized with cocaine the operation was easily performed under chloroform.

The bladder is washed, through a metal catheter, with a solution composed of Thompson's fluid with enough salt added to make a normal salt solution. Thompson's fluid is composed of borax, one part; glycerin, two parts; water, two parts; and three hundred cubic centimetres are added to a flask containing two thousand cubic centimetres of sterilized water. The solution is allowed to run in by siphon from a graduated jar, and care taken not to overdistend the bladder. When it returns clear, the bladder is emptied, and from one hundred cubic centimetres to three hundred cubic centimetres, according as the capacity has been determined during the preceding irrigation, are introduced.

In one case, that of a man suffering from paralysis of the bladder of ten years' duration, it was not possible to find the ureters with one hundred and fifty cubic centimetres in the bladder, but when two hundred and fifty cubic centimetres had been introduced they were in plain view and easily catheterized. The electrical power for the light is obtained from a four-cell storage battery made by the Southern Electric Company.

The shaft and beak of the cystoscope are immersed in a jar containing a five-per-cent carbolic-acid solution for one hour before it is used. The catheter is wrapped in a towel saturated with 1-to-1,000 bichloride-of-mercury solution. The connections should be made, and the light tried with the cystoscope in the jar, just before introducing it into the bladder. By determining the distance to which the rheostat must be turned to give a perfect view in a clear medium, and not going beyond this point, a comparative estimate of the amount of renal hæmaturia can be made by noting the time taken for the fluid in the bladder to become opaque. The cystoscope, having been lubricated with glycerin, is introduced, and absorbent cotton wrapped around the ocular end to take up the few drops that will escape between the time the stylet is removed and the catheter inserted. The objection that the fluid escapes in such amount as to make a material difference has not been found true. If the cotton is pressed tightly into the cannula after the catheter is in the ureter, the leakage will be completely stopped. The ureter of the suspected kidney is first sought, as, in case much time must be lost in finding it, and the urine from only one side can be obtained, it is desirable to have that from the probable seat of the disease.

If the ureter is not easily found, it may be located by occasional jets of urine shooting across the window, or by a swirl of blood if the case is one of renal hæmaturia. The ureter may present at such an angle as to make the introduction of the catheter impossible. The

presentation can be changed by raising or lowering the patient's leg, or it may be necessary to increase or diminish the amount of fluid in the bladder. When ready to catheterize, the stylet is withdrawn and the catheter quickly slipped into the cannula. The main difficulty to be overcome is to make the tip of the catheter take a sharp enough bend to enable it to engage in the mouth of the ureter; otherwise it slips over and along the bladder wall most provokingly. This bend is brought about by means of a stylet, with a weak spring at the end, which is kept in the catheter for some days, and which gradually brings it into proper shape. Nitze's latest cystoscope, designed for the purpose of catheterizing the ureter, is made so that the cannula has the necessary curve, and is freely movable over the optical portion of the instrument. This enables the surgeon to move the catheter and cannula together in any direction without changing the focus, which greatly simplifies and facilitates the operation.

The ureter, in entering the bladder, passes obliquely for two centimetres between the muscular and mucous coats. As the catheter is pushed in, it can be distinctly seen running under the mucous membrane until it leaves the bladder. It is introduced eight centimetres, and, while in the ureter, is kept under continuous observation. In irritable bladders the tenesmus may bend the catheter almost to a right angle.

The first drops appear in from one to five minutes, and are allowed to escape, in order that the bladder fluid may be washed out of the catheter. The flow is intermittent and irregular in amount. Fifteen or twenty drops may come in quick succession, followed by a few drops after an interval of from forty-five seconds to a minute and a half. A sterilized test tube receives the urine, and in from five to ten minutes enough can be collected for the purpose of analysis. If the urine does not flow freely, it can be accelerated by pressure over the kidney downward along the course of the ureter. The Nitze-Leiter cystoscope can be used continuously if the current is turned off for one minute at the end of each ten minutes. After an hour's use the fluid in the bladder will not be found uncomfortably warm.

It is essential in all cases, in order to catheterize the ureters, first, that the bladder shall be capable of holding sufficient fluid to bring the mouths of the ureters into view; second, that cystitis or hæmaturia do not exist to such a degree as to render cloudy the fluid introduced into the bladder before a reasonable time has elapsed. If these conditions are complied with, almost every ureter can be catheterized. Repeated attempts may be necessary if the catheter does not have the proper curve, or if there should be great vesical tenesmus.

In one instance—a man with suspected pyelitis—although the ure-

ters could be brought into plain view, and the catheter was repeatedly put against the mouth of each, it was found impossible to introduce it. Both ureters were surrounded by a circular ulcerated area with a radius of about five millimetres. Cocaine anæsthesia was used, but the patient suffered considerable pain, and, after about ten minutes' futile effort, refused to allow the examination to proceed further. He would not submit to an attempt under chloroform, and left the hospital without a positive diagnosis having been made. Possibly there was a stricture at the mouth of each ureter, but the appearance on one side was that of an exceptionally patulous entrance. This was the only case in which it was impossible to catheterize the ureters if the vesical and renal conditions were favorable. On several occasions the ureter could not be located at the first attempt, even after diligent and protracted search, and the possibility of this embarrassing complication must be considered in estimating the chances of a successful catheterization. If general anæsthesia is used, the operation can be more easily and quickly accomplished. No great amount of skill is necessary, but one must have knowledge of the appearance of the normal bladder through the cystoscope, the position of the ureters, etc., which can only be acquired by considerable experience. Consequently, the operation will probably not become popular among surgeons generally. In chronic nephritis the catheterization of the ureters is of the greatest value in establishing a correct prognosis. If the disease is found to be in one kidney, with the other normal or only slightly involved, the outlook is favorable. This condition would explain some cases which are seen clinically, in which the urine is loaded with albumin and tube casts, but which go on for years without developing serious constitutional symptoms. The information obtained from catheterization will prolong many lives, by preventing the surgeon from operating, when evidence of advanced disease on both sides is determined; and also by urging an immediate operation, when one kidney is normal, with a pyelitis or pyelo-nephritis on the other side, exhausting the patient's vitality more each day. If one kidney is slightly diseased and the other considerably, it will influence the operator to do a nephrotomy instead of a nephrectomy, thus leaving the gland to aid its less crippled fellow, and possibly turning the balance on the side of life. By following the methods which are now opened to us, the percentage of fatal results after operations on the kidneys should be still further lowered.

The time has arrived when no renal surgery should be attempted until after the surgeon has obtained accurate and positive knowledge of the condition of each kidney by means of the catheterization of the ureters.

NOTES ON DRUG ERUPTIONS.*

By JOHN A. FORDYCE, M. D.,

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I DESIRE to briefly report to the association some cases showing the more unusual manifestations of the effect of drugs on the cutaneous surface.

Case 1. The Nodular Form of Iodic Eruption.—The patient, a woman aged thirty-seven, was admitted to my service in the City Hospital in March, 1893, suffering from a hemiplegia of some years' standing, the result of an old syphilitic infection. She was given the iodide of potassium in increasing doses. While taking sixty grains three times a day, two and a half weeks after her admission, two painful and indurated nodules appeared in the subcutaneous tissue on the anterior and posterior surfaces of the right thigh, the paralyzed member.

Under the continued use of the iodide for the next two or three days they increased rapidly in size until they became larger than a man's fist, extending deeply into the subcutaneous tissue and involving a surface area about five inches in diameter. The overlying skin was reddened, and the swellings became softer, simulating deep-seated abscesses.

During the development of the larger swellings a similar but smaller one appeared on the anterior surface of the left thigh.

The house physician at the time directed my attention to the swellings, which he had called "peculiar abscesses." They were looked upon by me as due to the ingestion of the iodide of potassium, and its use was discontinued. Within a day or two the swellings began to subside, and at the end of a week had completely disappeared.

It was my intention to have again administered the iodide in order to determine conclusively its ætiological connection with the swellings in question. The patient, however, demanded her discharge from the hospital, and I was unable to verify my diagnosis.

I find in Morrow's work on *Drug Eruptions* references to similar subcutaneous swellings due to the administration of the iodide, by Vallanur, Talamon, Hallopeau, and Pellizari. In Hallopeau's case the localization of the nodular swellings was similar to that in my own case. Talamon mentions the close resemblance which the eruption in

* Read at the nineteenth annual meeting of the American Dermatological Association, Montreal, Canada, September 18, 1895.

his case bore to erythema nodosum. In my own case this comparison could scarcely be made, as the tumors were much larger than those usually seen in erythema nodosum; they were not accompanied by swelling or pain in the joints, and disappeared sooner than the latter eruption is accustomed to do.

As it is quite probable that all the eruptions due to the iodides are secondary to certain vascular changes which the drug is known to produce, it seems reasonable to suppose that the sluggish circulation in the paralyzed leg might in part have been responsible for the severer character of the swellings on that side.

Cases II and III. Rupialike Eruptions due to the Iodide of Potassium.—I have lately observed two examples of an eruption due to the internal administration of iodide of potassium, both of which closely simulated syphilitic rupia, and in one of which the drug eruption could scarcely be distinguished from the syphilide which was present at the same time.

One of the patients, a girl aged twenty, was taking a mixture containing ten grains of the iodide and a sixteenth of a grain of bichloride of mercury for an extensive rupial syphilide. After the administration of the mixture for a period of several weeks, and while the syphilitic eruption had almost healed, three or four rounded, crusted, brownish-red papulo-pustules, about the circumference of a silver dime, appeared on her forehead and cheeks. On removing the crusts the underlying skin in certain lesions presented an irregular granulating base, almost papillary in character, while in others the base was more elevated and fungouslike.

The further administration of the iodide was followed by an increase in the size of the ulcerated surfaces, and by the occurrence of new lesions, which were observed to begin as brownish-red tubercles on which vesicles developed that rapidly became pustular. The secretion dried in the form of superimposed dark-colored crusts, the ulcerated base at the same time extending in circumference as in syphilitic rupia.

The use of all specific remedies was discontinued, and the sores treated by a boric-acid ointment, under which they rapidly healed, leaving brownish-red pigmented scars, which could not be distinguished from the scars left by the former syphilide. After a period of several weeks the iodide alone was given, and with a similar result.

Case III.—A man, aged twenty-nine, affected with a gummatous syphilide of the chest and arms, was given a mixture similar to that employed in the former case.

When the specific eruption was rapidly disappearing a number of

ulcers with irregular depressions over their surfaces, and undermined edges, were noted on the forehead, cheeks, and upper lip.

The ulcers were preceded by an infiltration, brownish-red in color, which became pustular, and rapidly developed into open ulcers.

The ulcers were about an inch in diameter, and healed on stopping the iodide under an antiseptic ointment. They were at first mistaken for a new syphilitic outbreak, and were treated more vigorously with the iodides and mercury. They became larger under this treatment, while new lesions of like character developed.

Irregular pigmented scars were left, as in the former case.

The eruption in both of these patients corresponded closely with the anthracoid variety of the iodide eruptions. It differed, however, in the absence of the multiple openings or pustular points; and, in the case first reported, by the great quantity of superimposed crusts, giving it the physiognomy of a rupia.

Both of these cases, however, can be classed under the heading of the anthracoid form of iodide eruptions, and are referred to more particularly to emphasize their close resemblance to rupia. Such observations seem to demonstrate that the skin may, under certain conditions, respond in an almost identical manner to the chemical agent iodine and to the poison generated by the syphilitic virus.

Case IV. Erythema Scarlatiniforme following the Application of Mercurial Ointment to the Pubic Region.—A young man of twenty years presented himself at my clinic with a universal, diffuse, erythematous rash, involving alike the face and all portions of the cutaneous surface. The eruption closely simulated that of scarlatina, and in fact had been so diagnosticated by a physician who had seen him before.

The temperature was not elevated, and there was no implication of the throat. After stripping him I noticed that the skin about the pubic region was stained from the application of mercurial ointment, which, he said, he had used a few days before as a remedy for pediculi. Within two days after the application he had noticed the rash, which itched slightly, but otherwise gave him no trouble. I saw the patient again within a week, when abundant desquamation was taking place over the entire body, and especially noticeable on the hands and feet.

Case V.—The colored photograph which I present (photograph shown) illustrates the distribution of a diffuse and scattered erythematous rash which followed the application of blue ointment to the pubic region for the same purpose as that employed in the case just quoted. The diffuse erythema extends as high as the nipple line in front and behind, and as low as the knees. The rash is also diffuse on the inner aspects of the arms.

On the chest, both back and front, scattered patches of multiform erythema are seen, as well as on the arms and legs. On the back a circinate patch of erythema is seen, made by the confluence of smaller patches.

Desquamation of the affected surface followed within a few days, as in the other case.

In both of the patients the eruption was purely erythematous, with no formation of vesicles and very little swelling of the skin. Similar eruptions have been reported after the internal use of the drug, the protiodide and calomel (Fournier and Engleman), the hypodermic employment of calomel (Lesser), following the application of corrosive-sublimate dressings, and from exposure to the fumes of mercurial vapor. The application of mercurial ointment to the skin is more frequently followed by a papulo-vesicular eruption, which is more marked around the hair follicles. In an experience of several years at Hot Springs, where the inunction treatment of syphilis is almost exclusively employed, I do not recollect having seen such an extensive erythematous rash as in either of the cases reported.

Case VI. Erythematous Eruption from the Internal Use of Boric Acid.—A female patient in the City Hospital under my care was given boric acid in doses of thirty grains daily for the period of a month for a cystitis. At the end of this time she developed a multiform erythema of the trunk, more noticeable over the back and shoulders, and at the same time a marked swelling of the upper lids. The lids were painful, and the œdema so extensive as to cause them to be closed.

There was also a marked conjunctival inflammation and decided photophobia. Not suspecting that the boric acid was responsible for the condition, its use was continued. The erythematous eruption in the meantime spread over the trunk and upper extremities, and the painful œdema of the eyes increased until the lids became almost as hard as the induration of the initial sclerosis.

The boric acid was discontinued at this time, and cold applications made to the eyes. Within a short time the œdema of the lids began to grow less, and within a week had entirely disappeared, the erythema passing away at the same time.

Eruptions of an erythematous, vesicular, and bullous type have been reported from the administration and local use of boric acid. One observer has noted the occurrence of conjunctival injection.

I find no mention, however, of the peculiar solid œdema of the lids which my patient presented in such a marked degree.

THREE CASES OF AMPUTATION FOR EPITHELIOMA OF THE PENIS.

By DR. W. N. WISHARD,
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I N the first case the amputation was necessarily made close to the scrotum, and an opening was made into the urethra just behind the scrotum, which was utilized as a urethral canal. It is a matter of regret that in this case (No. 1, see cut), the same course was not pursued which was adopted in Case No. 2. In the latter case the disease had extended far back and involved the entire organ, and was encroaching on the scrotum. The urethra was cut transversely a short



CASE 1.

distance behind the scrotum, after having made a free perineal opening. The corpus spongiosum was then dissected free from the corpora cavernosa and the latter dissected out to the point where the corpus

spongiosum had been cut transversely. The mucous membrane of the urethra was stitched to the margin of the skin, and the corpora cavernosa and testes removed entirely. A small scrotal pouch was left



CASE 2.

to use as a flap in the event of any subsequent necessity for plastic work.

The third case was operated upon six months ago, making an amputation very close to the scrotum. The operation was done under cocaine, the patient positively refusing to take a general anæsthetic or to allow his testes to be removed.

There are two points of similarity in all three of these cases. In all of them the disease had advanced far back toward the scrotum at the time of the operation, and in neither of them were the inguinal glands involved. Jacobson states that a vast majority of these cases have their extension by way of the inguinal glands, but this was not observed in any one of these three instances.

Case No. 1 was operated on eight years ago, and the disease recurred a little over a year and a half later, at the point where the penis had been amputated. The patient passed from under the writer's observation shortly after the recurrence, and it was learned that he soon afterward died. Case No. 2 was operated on four and a half years ago, and the photograph shows the present condition of

the parts (see cut). His general health is perfect, and he has no bladder symptoms, being able to hold his urine all night and for three or four hours during the day. The only discomfort of which he complains is the necessity of sitting down when he urinates. The third case, which was operated on six months ago, is also well, and there are no signs of recurrence. In the second and third cases the diagnosis was fortified by a microscopic examination. In the first case, no microscopical examination was made, but the clinical symptoms were so characteristic as to leave very little doubt as to the condition existing.

Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

REGULAR MEETING, HELD ON TUESDAY EVENING, SEPTEMBER 24, 1895.

DR. C. W. CUTLER, *President, in the Chair.*

A Case for Diagnosis.—Presented by DR. H. G. KLOTZ.

The patient, importer of dry goods, aged thirty-five years, has a serpiginous papular affection on the back of both hands. Over four years ago there appeared first on one hand, soon after also on the other one, a cluster of rather hard, pale-red, flat-topped papules, of the size of a hempseed or a lentil. They were always dry and smooth, never bore scales or crusts, and caused no sensation of itching or burning at any time. In winter they are somewhat less conspicuous than in summer. Gradually new papules have cropped up in the periphery, while the old ones have disappeared, forming an irregular elevated border, inclosing perfectly normal, smooth, and soft skin, free from all cicatrization or pigmentation.

DR. GEORGE T. JACKSON regarded the case as a difficult one to diagnose. The lesions suggest both lichen planus and lupus erythematosus. He was inclined to think it one of lupus erythematosus.

DR. C. W. ALLEN regarded the case as one of lichen planus. He referred to a case of lichen planus coming under his observation in which similar marginate lesions on the glans penis and coincident lesions on the tongue were promptly cured by arsenic.

DR. JOHN A. FORDYCE said that while the individual lesions in this case resembled those of lichen planus, we would hardly expect that disease to confine itself for so long a time to one locality. The case reminded him of one reported by Crocker—a case of lupus erythematosus resembling lichen planus.

DR. P. A. MORROW said it would be difficult to conceive of a case of lupus persisting for so long a time without scarring. The latter is considered an inseparable feature of lupus. He had no suggestion to offer as to the nature of the lesions.

DR. GEORGE H. FOX said he felt inclined to disagree with the diagnosis of lichen planus, because there were no characteristic lesions. He had never seen a case of that disease in which the lesions were limited to the backs of the hands, or in which they presented the serpiginous outline which these showed. The man stated that they did not give rise to itching or burning, which would be very apt to be present in lichen planus. He did not care to venture a diagnosis.

DR. S. LUSTGARTEN said he would exclude lichen planus, syphilis, and lupus erythematosus. He was inclined to regard the case as one of erythema multiforme perstans. He presented a somewhat similar case to the society two years ago: the patient was a young boy who had erythematous lesions, serpiginous in character, extending over a large part of the body; these persisted for about a year. R. Crocker has lately published such a case in the *International Atlas*.

DR. KLOTZ said he was at first inclined to regard the case as one of lichen planus, but its long duration in one locality and its method of spreading had made him doubtful. As regards treatment, the speaker said he had unsuccessfully employed salicylic-acid plaster, resorcin, and various other applications, as well as arsenic internally. He would be obliged for suggestions for treatment.

DR. ALLEN suggested scarifying the advancing margin of the lesions, making crossed incisions, and then, after washing with a fairly strong bichloride solution, applying mercurial plaster continuously for a time, thus giving the mercury an opportunity of entering the skin.

DR. CUTLER inquired whether the lesions had been examined microscopically.

DR. KLOTZ said the patient found the lesions very annoying, because of their location. For fear of scarring he would probably object to all operative treatment, and for the same reason to the removal of a piece for microscopic examination.

DR. FOX mentioned a case of persistent erythema which was shown to the society about twelve years ago. In that case there were ring-shaped lesions about the size of a half dollar on the palms, which had persisted for two years or more without increasing in extent. They were not amenable to ordinary treatment, and were very similar to those in Dr. Klotz's case. As regards the existence of chronic erythema multiforme, this question came up for discussion some years ago, and a number of the members reported cases which in their clinical appearance resembled erythema multiforme, but which, instead of running the usual course of that affection, persisted for years, the circles and gyrae gradually extending over the skin. The speaker said he agreed with Dr. Lustgarten that the case shown to-night seems to be one of erythema multiforme perstans.

DR. SAMUEL SHERWELL referred to a case of erythema annulare which he presented at one of the meetings last year. The lesions first appeared on the palms and afterward on the soles of the feet.

DR. KLOTZ said erythema multiforme is generally regarded as an acute infectious, certainly as a vaso-motor, disease. Of chronic erythema—if we accept that term—he would speak in the same sense as we do of chronic urticaria, in cases in which the disease continues itself by constantly repeated fresh attacks.

DR. LUSTGARTEN said that in calling the case one of erythema multiforme perstans he simply classed it with that disease which it most closely resembles, both in appearance and location. In the future, when we have had an opportunity to study more of these cases, a suitable name may be found. Whether all cases of erythema are infectious is still very doubtful. They may be either infectious or of vaso-motor origin, and if we accept the latter view there is no reason why we should not have a chronic as well as an acute condition.

A Case for Diagnosis.—Presented by DR. SHERWELL.

J. M., male, aged forty years; a native of Ireland, and for eighteen years a resident of the United States. In December, 1894, while working as a stevedore, he had his right foot partially crushed; for this he was treated at St. Peter's Hospital, remaining there eleven weeks. About the same time his left hand (which had not been injured at all) became swollen and painful. The hand failed to improve, and in April, 1895, he returned to the hospital, and remained under treatment there for a month, without, however, receiving any benefit. The swelling, pain, and contracture of the fingers are gradually becoming more severe, and at present the left hand is almost entirely useless. The man states that about eleven years ago he injured his right hand, resulting in a permanent flexion of two of his fingers.

DR. JACKSON expressed the opinion that the condition of the hands was due to some neurotic trouble and had nothing to do with the injury to his foot.

DR. ALLEN said he did not think there was any causal relation between the injury to the right foot and the condition of the left hand. He was more inclined to attribute the latter to the injury to the opposite hand received eleven years before. In both arms a distinct thickening of the nerves at the elbow can be made out, and the swelling and contracture are probably the result of some obscure nerve lesion.

DR. FORDYCE thought the condition was due to a trophoneurotic disturbance, possibly an ascending neuritis caused by the injury to the opposite hand eleven years ago.

DR. SAMUEL ALEXANDER said there was marked thickening of the nerves in both arms, more marked in the left.

DR. SHERWELL said he saw the patient yesterday for the first time, and then only for a few minutes. The case was somewhat similar to one presented at the recent meeting of the American Dermatological Association at Montreal, in which there was an ivorylike hardening of the muscular structures of the arm.

Report of Cases presented at Previous Meetings.—DR. ALLEN said that at the meeting last May he presented an old gentleman with a lesion on the lip and another on the inside of the mouth, which were considered by some of the members as epithelioma and by others as specific. The lesion on the lip was entirely cured by applications of caustic potash; that on the inside of the mouth developed about its margins some small miliary nodules, from which a cheesy, yellowish material could be scooped out. The warty nature of the lesion persisted until he adopted Dr. Sherwell's suggestion and applied the acid nitrate of mercury; this was done by means of a glass stylet—such as is used in marking linen—pricking it in with the sharp point of the instrument. The applications were made twice weekly until the growth gradually softened, and it had almost entirely disappeared the last time the patient

called, which was a month ago. Dr. Allen said he was still in doubt as to the true character of the lesions, but he felt confident they were neither epitheliomatous nor specific.

DR. CUTLER reported that his patient with dermatitis herpetiformis, presented at the May meeting, had steadily improved and is now apparently entirely well. He has had one slight relapse, lasting a few days. The treatment was sulphur and rhubarb internally, to act on the bowels, and the following lotion externally:

Sulph. præcip.	3 jss. ;
Gum tragacanth	gr. v ;
Powdered camphor	gr. x ;
Limewater	3 j.

DR. FORDYCE reported that the last time he had seen his case of eczema unilaterialis, which was about six weeks ago, the lesions had disappeared.

A Case of Europhen Eruption.—Reported by DR. R. W. TAYLOR.

The patient was a man aged forty-five years, affected with syphilis, who had a sloughing gumma about the size of a silver quarter on the upper portion of the thigh. He objected to the use of iodoform because of its odor, and by the advice of a druggist he applied europhen, which contains about thirty-eight per cent of iodoform. About five grains of the drug was used, and this gave rise to a severe exudative erythema of the thigh and a follicular erythema of the leg. Dr. Taylor stated that this was the first instance of europhen poisoning that had come under his observation. A curious feature of the case was that the man has several times had iodoform applied without having observed any toxic effects.

DR. ALLEN stated that while he had never observed an erythema following the application of europhen, he saw no reason why it should not occur, because of the large amount of iodoform it contains.

DR. LUSTGARTEN said he had had a similar experience as Dr. Taylor with europhen, which he used in an obstinate case of tertiary syphilis after all internal treatment had failed. He scooped out some of the lesions on the buttocks and applied europhen. This gave rise to a very severe erythematous and weeping eczema, extending over a large part of the body. Two months later the application of mercurial plaster also produced an eczema. The speaker said he partially explained the eruption in his case by the fact that the applications were made to the buttocks, where the drugs were constantly rubbed into the body when the patient sat down.

DR. ALLEN reported two cases of iodoform eruption coming under his observation. In both instances the drug was applied to the fingers after crushing accidents, and gave rise to an intense iodoform dermatitis, with the formation of bullæ, and there was inability to use the injured members for a long time.

DR. TAYLOR said that seven or eight years ago he read a paper on the subject before the American Dermatological Association, in which he detailed a number of cases of iodoform poisoning, with dermal lesions and general intoxication, as well as the head symptoms, mania and dementia.

Chancre of the Cheek.—Reported by DR. R. W. TAYLOR.

The patient was a man who was bitten in a lecherous encounter with a soubrette, and developed a chancre on the cheek. It was three inches in diameter, and had the salience of a tomato sliced in half. The ganglia in the

neck became enormously enlarged and a general papular eruption made its appearance. The lesion, which was a good illustration of an elephantine chancre, was diagnosed as a cold abscess, as cancer, and several other things before its true character was recognized.

A somewhat similar case came under his observation about two years ago. The patient was a girl who developed five distinct excoriations on the chin. They were dull red and velvety in appearance, and gradually fused into one large chancre. There was enlargement of the glands in the neck. The tissues of the chin became very much infiltrated, producing almost total immobility of the lower jaw, and giving rise to much trouble in mastication and talking. The speaker also mentioned another case recently coming under his observation, that of a girl who developed a chancre of the hard palate.

DR. SHERWELL mentioned the case of a man who developed a lesion at the tip of his nose, which was supposed to be a chancre.

DR. TAYLOR said that many years ago he saw a young man who was bitten in the nose and developed a typical indurated chancre. He has also seen a chancre of the right ala nasi, and during the past two years he has seen two chancres of the eyelids.

DR. FOX exhibited a number of photographs which he recently took at the Riverside Hospital, showing the eruption of variola in its various stages.

DR. LUSTGARTEN reported a case of angineurotic œdema. The patient was a married woman and the mother of healthy children. Commencing a year and a half ago, at intervals of about a fortnight, she developed angineurotic œdema in different parts of the body; the condition appeared quite frequently on the face, tongue, arms, and feet, and lasted about four or five days. A careful examination showed enlargement of the thyroid gland and slight exophthalmus of the right eye. She also had attacks of palpitation at the time of an eruption, while during the intervals her pulse was normal. There was a slight presystolic murmur; the kidneys were normal. She was put on pilocarpine, which failed to produce perspiration even in fairly large doses (two fifths of a grain). She was then put on thymus, in tablet form, which did not have any effect. Thyroid was substituted in small doses (two grains, three times daily), as she was intolerant to a larger dose. The result was quite remarkable. The swelling of the thyroid disappeared, as did also the exophthalmus and the attacks of palpitation. She has had no further attacks of œdema, excepting a slight urticarial-like swelling, which disappeared in a few hours. The woman showed no hysterical stigmata.

DR. SHERWELL referred to a case of localized œdema which he reported some years ago. The patient was a woman who developed giantlike urticarial swellings in various portions of the body. They were especially prone to attack the region about the breasts. The patient died of œdema of the lungs.

AMERICAN DERMATOLOGICAL ASSOCIATION.

NINETEENTH ANNUAL MEETING, HELD IN MONTREAL, CANADA, SEPTEMBER
17, 18, AND 19, 1895.

DR. SAMUEL SHERWELL, *President, in the Chair.*

(CONTINUED FROM PAGE 480.)

A Unique Case of Agminate Folliculitis of Parasitic Origin.*—By DR. M. B. HARTZELL, of Philadelphia.

DR. WIGGLESWORTH wished to ask whether Dr. Hartzell considered there was any relation as to the extent and severity of the lesion and the sources from which it was derived—whether from the horse or some smaller animal.

DR. WHITE thought we recognized how deeply into the tissues of the skin some forms of trichophyton could penetrate, as seen in kerion, a much more common type of this infection than the agminate forms.

DR. HYDE had seen exceedingly severe trichophyton derived from sheep in sheep-shearers, and in these cases it had always taken the form of sycosis.

DR. FOX objected to the title of the paper, and thought it should have been "a unique case of trichophytosis." Most of the members, he thought, had seen these peculiar forms of trichophytosis which occasionally showed these small folliculate patches.

DR. SHERWELL had spoken at former meetings of the ravages of trichophyton in lower animals. He thought scratching had something to do with the implication of tissues.

DR. HARTZELL, in answer to Dr. Wigglesworth, said he believed the severity of the disease was determined to a very considerable extent by the variety of the plant, but much more by the character of the soil. The fungus grew much more luxuriantly in deep cases than upon the surface, and the elements were larger than in the superficial variety. In this case there was a double infection, and he believed to a certain extent in an antagonism between the staphylococcus and the trichophyton. The fungus did not grow at all well in the pustules, but it was found deep down, where there were no pus cells. He called this an "uncommon case," because, so far as he knew, no other case of this character occurring in this situation had ever been reported.

Note on the Antiparasitic Treatment of Eczema.—By DR. JOSEPH ZEISLER, of Chicago.

He did not go into a detailed presentation of such clinical and pathological facts which made it probable that many eczemas owed their existence or persistence to the presence of parasites, but pointed out that many of the well-known and trusted remedies in the local management of eczema—like salicylic acid, carbolic acid, thymol, tar, and others—were distinct parasiticides. Without trying to discredit the value of internal, hygienic, and dietetic measures, he then gave his experience as to the use of strong antiparasitic drugs, among which he found particularly valuable a combination of equal parts of chloral,

* See page 455.

iodine, and carbolic acid, as suggested by Cutler for other purposes. He fully detailed the indications and mode of application for the mixture, which he did not consider as a panacea, but rather as a type for a whole number of other probably equally useful drugs or combination of drugs. He mentioned, for instance, rather encouraging results in the treatment of eczema with creolin.

DR. BOWEN said many cases of eczema, especially the sharply defined and serpiginous forms, might be of parasitic origin. It was at present simply a hypothesis.

DR. FOX was opposed to Dr. Zeisler's views. He had found Dr. Cutler's mixture after a fair trial inferior to carbolic acid alone, or iodine alone, and soothing remedies. In his opinion, dietetic and hygienic remedies were of greater importance than local measures. Nine out of ten patients with such ailments would do better in the hands of an athletic trainer than in those of a physician. He thought that this point should be more seriously considered by the profession. As to medicines, he had carefully tested all the new remedies that had appeared for years back, but he could not say that he found any of them superior to the old.

DR. JACKSON thought we were not yet prepared to admit the parasitic origin of eczema. He had tried Cutler's mixture, and whereas in some cases it did apparently very well, yet it did not do any better than the older remedies; and, besides, he never could see why a combination of carbolic acid and iodine should act better than these drugs separately. He objected to this combination treatment as tending to confuse; he had tried creolin, but found it sometimes very irritating. He believed it most beneficial in acute cases.

DR. HARTZELL was very loath to believe in the parasitic origin of eczema. No doubt all kinds of micro-organisms could be found on eczemic patches, but so they could on the normal skin, and it had yet to be proved that they were instrumental in its production. So far as his experience went, antiparasitic treatment had shown a tendency to set up irritation, and the cases are often aggravated. In patches of chronic eczema he believed they acted beneficially by setting up an inflammation, which caused the skin to take on a more healthy condition and the eczema disappeared.

DR. FORDYCE believed that eczema depended on a great many conditions, both constitutional and local. An eczema could result from heat or chemical agents, and persist after the irritant ceased. In some cases he thought it might be purely a parasitic affection, but in others he believed it a constitutional affection with the parasitic element superadded. These cases were benefited by the antiparasitic treatment. He could recall a number of cases of eczema rubrum and squamosum of the leg that were cured by sulphur ointment after the usual applications had failed. He had used Cutler's mixture only in ringworm of the scalp, which Cutler claimed could be cured by three or four applications. He had so far made half a dozen applications to a case without improvement.

DR. ELLIOT had believed most emphatically for a number of years that a large proportion of cases of eczema were due to parasites. A close study of eczema showed that a large number of cases, from their clinical appearance and their whole behavior, are evidently parasitical. On the other hand, a large number depended on some condition inside the body. Some, again, were due to internal conditions with a local factor added. Again, if one were to

take the result of treatment, one could state more emphatically still its parasitic origin. He knew a number of cases which were not at all benefited by internal treatment. One case in which a large portion of the body was covered by aggravated lesions, which were present over six months in spite of constitutional treatment, disappeared in three weeks when the antiparasitic remedies were tried. He had never been able to see any good from dietetic treatment, and he believed that, although in some cases it might benefit the patient, it never had any absolute curative effect on the disease.

DR. WHITE said that all dermatitis could exist in a serpiginous or marginal form in the tissues of the skin without the action of a parasite. He could not see any evidence why we should conclude that eczema was ever a parasitic disease except in so far as its circular or peripheral growth might so indicate and if this was sufficient, then every case of psoriasis must be of parasitic origin. No essential proof of its parasitic nature by contagion or inoculation has ever been given. The long endurance of the affection, its capability of spontaneous involution, the limitation of its spreading, were wholly against the ordinary action of parasites in the skin. The cure of the disease by antiparasitic remedies was no proof. The paper might as well be called "a stimulating treatment of eczema." Our selection of drugs for the external treatment of eczema was purely empirical. Certain drugs have for centuries been more or less successfully employed; new ones from time to time appear, were highly spoken of, and then disappeared, when we generally fell back on the old ones.

DR. BULKLEY remarked that after being known as an absolute defender of the constitutional origin of eczema, he now thought there were two sides to the question. Whatever might be the local or immediate cause of eczema, he did not believe it could come into operation unless the soil was ready for it. He did not believe any person was entirely cured of eczema until he had undergone a thorough renovation of his system. This done, the local cause might still exist, but it was powerless. He believed still more than ever in the necessity for internal treatment; but he believed in local treatment also. The more he observed, the more convinced did he become that there were local causes for eczema, and he had come to use local treatment in eczema more and more. We could not exclude the idea of parasiticism because we could not prove the parasite by means of the microscope. He found Cutler's mixture very useful in ringworm when carefully employed. He could not imagine many cases of eczema where the full strength could be used. He had not departed one iota from his opinions as to the paramount importance of constitutional treatment; but this did not make it necessary for him to believe local treatment useless.

DR. KLOTZ said: Certain eczemas have a tendency to spontaneous cure, and the latter only takes place in many instances when the patience of physician and patient has been exhausted in the attempt to cure it. He did not believe in ointments, (1) because they easily proved irritating, (2) because a parasiticide lost most of its power when used as an ointment. He used Cutler's solution with some success. A fifty-per-cent ichthyol solution he also found useful. He thought most of these remedies should be preceded by the application of a solution of caustic potash, which served to remove the *débris* of the lesions, and allowed the real remedies to get to the seat of action.

Many remedies he believed failed because they were not properly employed. He used a watery solution of ichthyol.

DR. WIGGLESWORTH thought that Dr. Zeisler was wiser than he knew in preparing this paper, which was bringing out the views of every member of the association. We had a superficial protective envelope—the skin—for the whole body. It was continually desquamating; being farthest from the center of circulation, it was less highly vitalized than any other part of the body; it was most exposed to depressing influences of an external nature; and, according to the severity of the attack from these latter, or weakness of the defense on the part of the skin, we could get nutritive changes in the latter, which it was customary to call eczema. Granted, then, these local remedies are effective in curing the lesion, we had still existing the same external influence which made the attack and the same internal weakness which permitted of the success of the attack; and, while these existed, could we truly say we had cured the disease? As to the practical aspect of the treatment of eczema, he thought we were tending too much to attribute magical effects to external applications. Personally, he agreed with Dr. Fox in thinking that, however much the gentlemen present might favor constitutional treatment in the abstract, practically they neglected it in the treatment of the disease. He disagreed with Dr. Elliot as to the dietetic treatment of eczema. He gave patients the same treatment they had received from others, but supplemented it with hygienic treatment, and they got well. He endeavored to bring about a condition of health and improve the general nutrition of the skin—bathing in one case, fresh air in another, and sound sleep in another. Again, improper diet must be corrected. Better results would be obtained if we would be thoroughly practical and remember that we were dealing with a mass of material working under physiological laws.

DR. ROBINSON did not consider that there was such a thing as eczema; he preferred to call the conditions included under that name catarrhal dermatitis until we could separate them according to their respective causes. Inflammation of the skin could be caused by mechanical and chemical means, and it did not follow that because you had such a condition it must necessarily be of a parasitic origin, although most of them were parasitic. Small intestine fermentation, caused by a micro-organism, often produced eczema in children and adults; and thus we saw that not only could we have dermatitis arising from mechanical and chemical agents, from external parasites, but from internal irritation as well, and it was only after ascertaining its proper cause that we could hope to treat it properly. In seborrheal eczema and ringworm the changes resulting from the parasitic action are not great, and the condition required little more than parasitic treatment. But in a large number of other cases, concerning which we knew so little, more is necessary. In chronic eczema, where the changes took place in a certain layer of the skin (prickle layer), what we wanted, was to protect that layer until brought into a normal condition; to do this a more thorough knowledge not only of our histology, but of the pathology as well was absolutely required. Of course, predisposing conditions were factors to be reckoned with, but they were often only concomitant features. In diabetes and in the uric-acid diathesis the conditions might be cured by internal treatment alone, but that was no reason why the disease should not have a local cause (a micro-organism).

DR. HYDE did not wish it understood by his previous remarks that he be-

lieved there were no cases of eczema parasitic in origin; he believed there were such, and that they required antiparasitic treatment. These cases were, however, in the minority.

DR. SHEPHERD said all cases were parasitic, in his opinion. The fact that internal treatment sometimes cured an eczema did not prove the constitutional origin of the disease; it simply altered the conditions of the affected part and enabled it to throw off the disease. Micrococcal elements were always present on the skin; it only required a suitable soil to cause them to grow, and that soil is generally of the nature of a depression of vitality in the part. Take erysipelas, for instance: the streptococcus in one case produced erysipelas; in another, peritonitis; in another, ordinary inflammation. It was not that the streptococci differed, but rather that the condition of the soil differed. In uric-acid diathesis and such like conditions which predispose to eczema, if you removed the cause the eczema disappeared; but this did not prove the character of their immediate origin.

DR. GRAHAM had in the past two years seen two cases which demonstrated the existence of eczema arising from internal causes. One was a case of universal eczema, accompanied by hepatic symptoms; the gall bladder was filled with gallstones. In a second case the post-mortem examination showed the liver riddled with tubercles and in a state of fatty degeneration.

DR. SHERWELL congratulated the members on the character of the discussion, and expressed his satisfaction that the suggestion he had made at an earlier meeting as to the propriety of holding a general discussion on the treatment of eczema was so well warranted. Personally he had a leaning in favor of the constitutional treatment, but that did not prevent him from making use of the local treatment.

DR. ZEISLER had not expected to settle the question in a discussion, but he was sufficiently supported in his having brought the paper before the association by the fact that several present agreed with him as to the parasitic nature of eczema. They need not be ashamed of such a belief when they had such a pre-eminent representative of English dermatology as Malcolm Morris on their side. It seemed to him that a new era was dawning in the treatment of eczema. In reply to Dr. Jackson, he thought a combination of drugs had its use as well as its abuse; in the case of Cutler's solution there was reason why the compound should be superior to the separate ingredients. Carbolic acid alone was too strong, iodine was a good diluent, and the chloral might have a peculiar effect of its own. The application of these lotions, he thought, destroyed the upper layer of the skin; a slight eschar was formed, which in a few days, under proper soothing treatment, was removed; and with it went the inflammation and irritating microbes that existed in that layer of the skin. The next application goes a little further, until all were removed, and the condition cured. He fully agreed as to the importance of hygienic treatment, but did not believe a severe case could be cured by these means alone. He could not grasp the connection between dieting and the cure of a severe local inflammation.

Erysipelas.—DR. ALLEN, of New York, read the next paper on this subject, dwelling upon its ætiological connection with preceding skin lesion, including numerous dermatoses.

Fifty per cent of his cases had originated in cutaneous eruptions or vaccination. In many of the remainder, mucous-membrane lesions could be found.

The tonsil, nasal and faucial mucous-membrane lesions accounted for most facial cases, which made up one half of his present series. The speaker tried to show that Kaposi and others were wrong in stating that attempts to limit the spread of erysipelas were futile.

In thirty of his fifty most recent cases he had employed the band of adhesive plaster snugly applied about an extremity—the trunk or the head—with the result that in fourteen instances there was no spreading beyond this barrier. The best application was ichthyol in collodion, from ten to fifty per cent strength. This must be painted over the whole area included within the plaster bands.

Many cases were thus checked almost at once, and in so large a percentage was the limit of the process but a few days that the speaker thought the claim could be made for this method of combining the plaster with a strong ichthyol varnish, that it was most efficacious.

DR. SHEPHERD said he had seen many cases of erysipelas, but had never found any means of resisting its progress successfully. He considered it a self-limited disease.

DR. FORDYCE had seen better results from ichthyol than from any other local application.

DR. ZEISLER agreed with the reader of the paper that local measures were much more important than constitutional. In the wards under his supervision in Chicago they had formerly used boric-acid solutions with fair success, but had recently discarded it in favor of ichthyol.

DR. WHITE could not see that anything was gained by the rubber adhesive bandage. He thought the amount of spreading mentioned by Dr. Allen was more than he would expect to see when what he considered the best treatment was employed. He invariably used one treatment—a solution of carbolic acid in alcohol—and he expected almost every case to be controlled within three days, often within forty-eight hours. If he treated one part of the face with it, and another part with the ichthyol solution, the former method invariably cut short the disease in its portion quicker than the ichthyol.

DR. ROBINSON preferred black wash, and the old sugar of lead and opium to constrict the lymph spaces and form an obstruction to the passage of the streptococci. Internally the tincture of iron was indicated.

DR. BRONSON recommended ichthyol, also good strong solutions (two drachms to the ounce) of resorcin in cases of superficial erysipelas. It left the face in a somewhat unsightly condition, but this passed off.

DR. ELLIOT treated a large proportion of his cases with ichthyol, fifty-per-cent solution, which always arrests the disease in two or three days. A ten-per-cent ointment of the oleate of lead, and, even better than that, a ten-per-cent solution of the chloride of phenol he found very effective. When under this treatment one gets cases recovering in two or three days, it seemed to him that one must attribute their cure to the effect of the drug.

DR. ALLEN, in reply to Dr. Shepherd, said erysipelas was indeed a self-limited disease, but the limit was too often the death of the patient. In the infant hospitals of Vienna erysipelas following vaccination shows a very large mortality. He referred to fatal cases of his own in infants, though there were no deaths in the fifty cases now reported. When he applied the band and the process stopped, it seemed to him that there was a limitation which meant something. He would not like to treat erysipelas under the impression that

it was a self-limited disease, by leaving it alone and letting it stop by itself. So far as his experience went, he found this combined method better than any other.

Notes on Drug Eruptions.*—By DR. J. A. FORDYCE, of New York.

DR. JACKSON said a few months ago he was called to a case supposed to be scarlatina. The patient had been sick several days. The eruption commenced as a slight irritation about the genital region. For this a physician had prescribed blue ointment; thereupon the erythematous rash began to spread till it involved a large portion of the surface. The attending doctor's diagnosis was scarlet fever, and he reported it as such to the Board of Health. The speaker had found the patient without fever, without any of the other clinical signs of scarlet fever except the rash, and decided that the case was scarlatiniform rash from mercurial ointment.

DR. WHITE thought it had been occasionally observed that the use of stimulating applications to the skin was capable of lighting up widely spread conditions of dermatitis. Although he never saw a case so absolutely universal as this, he often observed it after the use of mercurial ointment on the skin, but he could never satisfy himself how far it was due to any specific action of the application, or whether, the skin being inflamed in one part, that inflammation might spread of its own accord. He had seen two instances of boric-acid eruptions, but he did not think there were many such to be found in the books.

DR. KLOTZ had seen an erythema, this past summer, developed after general inunction of the body for syphilis. He had recently seen a case of fatal poisoning following the use of boric acid, which is generally considered an innocent drug. He had seen a dermatitis occur after the prolonged use of small doses. In the fatal case death was due to an acute desquamative nephritis.

Report of a Case of Urticaria Pigmentosa of over Twenty Years' Duration.†—By DR. P. A. MORROW, of New York.

DR. WHITE believed one of the most notable features of this disease at present was its greater prevalence, or at least more frequent recognition, in England than in any other civilized part of Europe. The number of cases of this disease recorded in this association is very small (twenty-four). He himself had seen altogether only three cases, the latest being during the past summer.

DR. BRONSON thought the persistence of the lesions in certain situations as shown by the photographs a very interesting feature in this case. He asked Dr. Morrow how long this appearance of factitious urticaria remained, and whether, when it disappeared, it could be reproduced immediately or only after an interval.

DR. MORROW said the patient was stripped forty minutes. Within fifteen or twenty minutes the lines intervening between the lesions would become effaced, and the urticarial elevations would remain persistent. By slightly rubbing the surface, these lines had a tendency to reappear. The urticaria on the sound skin had a tendency to disappear in from forty to sixty minutes. The patient himself, on being asked to note particularly the length of time, said two or three hours elapsed before they had entirely disappeared. As to

* See page 496.

† See page 445.

reproducing it immediately, he had never tried, but he thought it quite possible.

DR. ELLIOT gave an account of a case of this disease occurring in a man who was under his observation some five or six years ago. The trouble began at twenty-eight. Every lesion presented the peculiar characteristics of urticaria pigmentosa. The pigmentation was dark. He had the man under observation for several months, and observed absolutely no change in the condition. He incised half a dozen of the spots which showed the mast cells around the vessels.

DR. HYDE thought this paper marked an era in their association. In listening to this report his mind went back to the first meeting held at Niagara Falls, and when he heard a member reporting a case which he had twenty years under observation, he felt that we were getting on. If all could do as much, how much more valuable would be their papers! The speaker saw his first case of this disease, this very case, in New York city, at a meeting of this association; since then he had seen three cases in Chicago, two in private and one in public practice. From a study of these cases he was strongly of the opinion that there was a difference between the ordinary forms of urticaria and urticaria pigmentosa, although, in view of our present inadequate knowledge, it might be better to consider them in the same category. The phenomena shown here do sometimes occur where we have a permanent condition instead of one with this transitory character. In a young woman, who from her earliest infancy exhibited this same sensitiveness of the skin, the mildest external application was sufficient to produce this irritation without pigmentation. He sometimes wondered if it were not possible to have this disease with the pigmentation left out.

DR. ALLEN had one case of urticaria pigmentosa in his practice off and on for the past few years. With reference to the rapidity with which the urticarial wheals come out on the permanent lesions, or on the neighboring healthy skin, it often happened that in removing his clothes, or in indulging in a little scratching or rubbing after their removal, there was an almost immediate appearance of plaques as large as the palm, which became diffused over the healthy skin as well as the dark-brown pigment spots.

DR. SHERWELL had reported one or two such cases, one certainly almost analogous. He was inclined to think there were present two distinct affections. He mentioned a case of a Kentucky Irishman, standing over six feet, very muscular and robust. Some had pronounced it syphilis, on account of the pigmentation in the spots, and he was sent to the speaker for diagnosis. The character of the lesions satisfied him that it was not syphilis. Tests confirmed his suspicions that he had to do with a case of urticaria pigmentosa. Some hypertrophic lesions looked as if they had fluid in them. The disease had existed in the speaker's case from the very earliest childhood, yet it never seemed to interfere with the health. The description of Dr. Morrow's later phases corresponded exactly with this case.

DR. MORROW did not express any opinion as to the propriety of excluding or including cases which occur for the first time in adult life. The disease is one essentially peculiar to infancy, and we would naturally not expect it to develop for the first time late in life. Crocker mentions Dr. Elliot's case in his book, and says he does not regard it as an urticaria pigmentosa.

In regard to the factitious attacks, they may be provoked in three ways:

1, by nervous excitement; 2, by overheating; 3, by artificial means. A point of interest in explaining the pathogenic mode is whether these phenomena are evoked by the influence on the peripheric ganglia connected directly with the vaso-motor center, or whether they are of central origin, which is reflected from the nerve centers. In connection with this inquiry it is very interesting to note that persons affected with hemianæsthesia, for instance, are just as susceptible to the phenomena of dermatographism as individuals with normal sensation, and in a number of cases it has been shown that an anæsthesia of one side makes an admirable ground, so to speak, for this work. Again, in anæsthetic lepers these phenomena were observed as a noticeable feature. Whether it existed before or not, is unknown. Certainly the annulment of what we call ordinary sensibility does not interfere in the slightest degree with the development of factitious urticaria.

Ulerythema Sycosiforme.—DR. CANTRELL, of Philadelphia, presented a paper in conjunction with Dr. Schamberg, with the above title. He described a case of the affection to which Unna called attention under the above title in 1889. A man, aged fifty-five years, had suffered in 1886 from a pustular disease of the beard lasting for two years and ending in recovery. In 1891 he again became affected with what seemed to be a non-parasitic sycosis. Two years later a smooth glistening area of atrophic appearance occupied portions of the cheeks, showing complete loss of hair in places. No pustules, but over the area a few vesicles and blebs, which dried into brownish crusts. The affection proved very obstinate, new vesicles appearing every few days. Arsenic aggravated the condition. There is a follicular and peri-follicular inflammation which goes on to destruction of the hair follicle and formation of atrophic scars. Histologically the stratum corneum and lucidum were missing; the granulosum was well marked. Intense, sharply-defined cell infiltration, nests with walls consisting of fibers of connective tissue. Cell infiltration most marked around hair follicles. Overgrowth of connective tissue in papillary layer. Few hair follicles and no sebaceous glands in section. Giant cells absent. The disease simulates, but is not identical with, lupus vulgaris. No nodules, no bacilli. The writers agree with Unna in considering the condition a distinct entity and accept the name.

A Further Study of Alopecia Præsenilis or Præmatura and its Most Frequent Cause, Eczema Seborrhoicum.—By DR. GEORGE T. ELLIOT, of New York.

On the basis of three hundred and forty-four cases treated in private practice, Dr. Elliot came to the conclusion that heredity was a very small factor in producing early alopecia. Only four incontestable examples of such origin were found by him, but the overwhelming majority, over ninety-one per cent, were the result of local disease, the one known as eczema seborrhoicum.

Included in the paper read, there was also a preliminary report on the bacteriology of seborrhoic eczema by Dr. Merrill, of Pepperell, Mass. He had isolated two varieties of diplococci, both of which, inoculated upon healthy subjects, produced lesions characteristic of the disease. The one, a nonchromogenic organism, produced pityriasis manifestations; the other, a chromogenic organism, caused a lesion covered with yellow, greasy scales. When both were inoculated together, then greasy, crumbly crusts resulted.

It would appear from Dr. Merrill's investigations that the disease, suspected of being parasitic in nature, was so in reality.

DR. JACKSON said he had been on record since 1892 as claiming that some form of seborrhœal trouble was at the foundation in a large proportion of cases of loss of hair. He thought there must be something besides the seborrhœa to produce the baldness, though those having it were predisposed. Falling of the hair is more common in cities, where people are not in such vigorous condition.

DR. ZEISLER believed seborrhœa the most frequent cause of baldness, and he directed treatment to the relief of that condition.

DR. WHITE would like more evidence of the inflammatory nature of the disease before he could accept the term dermatitis seborrhoica. In the vast majority of cases conditions are not present which would warrant the term dermatitis. The percentage of hereditary cases is large. He thought frequent washing of the scalp, more common in cities than in the country, had something to do with loss of hair.

DR. BULKLEY was convinced of the parasitic origin of a large number of cases of baldness. He called attention to the marked absence of baldness in people who ate coarse dark bread and fatty food. He thought fine wheat flour unfavorable to strong growth of hair. He had found resorcin of great service. He found much difficulty in stimulating new growth, which required control of all the factors relating to hair nutrition and the destruction of parasites by drugs.

DR. WIGGLESWORTH agreed in the importance of diet. He did not see the advantage of the term dermatitis seborrhoica over the old one of seborrhœa sicca.

DR. ELLIOT said there was no such condition as dry seborrhœa. It was simply a condition of catarrhal dermatitis.

DR. WIGGLESWORTH said Kaposi called the condition which Dr. Elliot says does not exist seborrhœa sicca, and he had himself written upon the subject. He did not believe in heredity. Now that we have reached the fact of contagiousness (and he had long considered it such), we should warn against the careless use of toilet articles in public places. The hair grows in the horny layer, and what stimulates the one stimulates the other; rapid growth means rapid exfoliation of the horny cuticle; hence the apparent seborrhœa with luxuriant hair.

DR. ROBINSON thought the loss of hair backward from the forehead without seborrhœa was usually hereditary. The hair has a physiological life duration just as the body as a whole has. Certain forms of seborrhœal eczema are frequently followed by an increased growth of hair. He did not think the process a dermatitis, but rather an hypertrophy of epidermis which injured the hairs by pressure. He spoke of an organism hard to remove from the skin which he called the *Staphylococcus epidermis albus*. He wondered if it bore any relation to the one described by Dr. Elliot. He had, by injecting pure cultures into the scalp, never failed to produce falling of the hair in patches as large as an inch and a quarter in diameter and without sign of inflammation.

DR. BOWEN was not convinced that the dermatitis in these cases is primary and predominant. He hoped Dr. Merrill's observations would be continued and elaborated.

DR. SHERWELL thought the paper an important one, which should receive careful consideration.

DR. ELLIOT said he was much interested in Dr. Robinson's remarks. He did not think, however, that the excessive accumulation of diplococci could alone produce pathological symptoms, a great many of which must be due to atrophy. Dr. Merrill's germ was a diplococcus and not a staphylococcus.

The afternoon session was held September 19th at the Montreal General Hospital, by invitation of Dr. Shepherd, who exhibited patients of that institution:

I. A young woman suffering from a most aggravated form of acne indurata with keloidal formations.

II. A man with syphilitic tertiary nodes and ulcers of the back.

III. A man with extreme condition of varicose veins of the leg.

IV. A man with lymph stasis of the arm.

V. A woman with xanthoma tuberosum—cured by operation for gallstones.

VI. A woman with ichthyosis.

The Elastic Circular Bandage.—DR. FOX took advantage of the condition present in Case III to demonstrate the utility of his elastic circular bandage. This consisted of a series of elastic rings of different circumferences, according to the position of the leg they were intended to fit, which were adjusted to the limb from below upward. Each ring or band measured from four to six inches in breadth. The patient expressed himself as feeling greatly relieved when the bandage was on.

The last paper on the programme was entitled **Sleep in its Relations to Diseases of the Skin**, by DR. BULKLEY, of New York.

Election of Officers.—President, Dr. A. R. Robinson, of New York; Vice-president, Dr. F. J. Shepherd, of Montreal; Secretary and Treasurer, Dr. C. W. Allen, of New York.

Correspondence.

DRAINAGE AFTER PROSTATECTOMY.—A REPLY TO MR. NICOLL.

Editor JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR: In my reply to Mr. Nicoll's first letter (August number of the *Journal*) commenting on my method of prostatectomy, I simply mentioned the reasons why I favored perineal as well as suprapubic drainage after enucleation of the hypertrophy. As Mr. Nicoll in a spirit of perfectly fair criticism (October number of the *Journal*) has taken up, one by one, the reasons I advanced in his endeavor to show that such opinions should not hold, I beg a little space to meet the gentleman's objections.

(a) Mr. Nicoll thinks the perineal tube delays convalescence and thereby may turn the scale in critical cases, by inducing pulmonary congestion and cerebral œdema.

I do not really see the force of this objection, as it is hard for me to trace the connecting links between the perineal tube and the cerebral œdema. The perineal tube never delays convalescence, since it is always permanently removed before the proper time comes for the patient to sit up or to be

moved from the prone position. The longest time I have had occasion for the perineal tube has been twelve days, and oftentimes it can be removed in five days to a week. Cerebral œdema in these cases is an evidence of uræmia. The best way to guard against uræmia is by extremely free drainage and abundant diuresis. The perineal tube will certainly aid in the drainage, and thereby be an aid in such an emergency.

(b) Mr. Nicoll fears the effects of urine in contact with the perineal wound, and holds that a perineal tube from the bladder outward can not afford suitable drainage. "The urine," he states, "gravitates into the cavity from which the body and lobes of the prostate have been removed, which cavity lies on the front of the rectum in the hollow of the sacral curve, and has neither dependent nor other drainage, being, in the recumbent posture of the patient, below the level of both the perineal tube and the perineal wound."

With reference to this objection I can say that in all my operations, and in all the operations I have observed, dependent and thorough drainage by the perineal vesical tube has been attained, except, perhaps, in one instance where convalescence was somewhat delayed by suppuration about the base of the bladder, which suppuration, however, I am more inclined to think, was due to injury to the ejaculatory duct rather than to faulty drainage, since it was followed by suppuration of the corresponding epididymis. I take it that Mr. Nicoll is wrong in stating that the cavity from which the prostatic lobes have been removed lies in the hollow of the sacral curve. The rectum fills up that hollow. I suspect also that one reason Mr. Nicoll has experienced trouble with perineal drainage is because the external opening of the perineal wound is made too high up and not down close to the rectal sphincter.

In this connection also it may be said that in practicing Nicoll's method of enucleation there is great danger of tearing the deep urethra or the bladder wall covering the prostatic hypertrophy, thus allowing of a leakage of urine into the perineal wound, and sometimes it is very difficult to decide at the time whether a rent has been made or not. If a tear has taken place, the mischief can be obviated by free perineal vesical drainage.

(c) I hold that "the suprapubic wound is more apt to delay convalescence than the perineal one." By that statement I meant that infiltration into the space of Retzius and sloughing of the surrounding fatty tissues were the dangers to be feared, and not fistulæ, as Mr. Nicoll has supposed. If prostatic hypertrophy has been properly enucleated, there ought to be no danger of a persisting suprapubic fistula or (according to my method, where simply a boutonnière opening is made in the perinæum) of a perineal fistula.

(d) Here Mr. Nicoll says, "Dr. Fuller is of opinion that perineal drainage is essential to success." It is evident that the gentleman by referring only to a portion of a sentence of mine has conveyed to all readers a false impression of my meaning. What I did say was: "The suprapubic wound is more apt to delay convalescence in these cases than the perineal one. Consequently, my aim has been to strive for union by first intention as far as is possible with reference to the suprapubic wound, and success in this direction can be attained only by establishing dependent drainage."

Mr. Nicoll, moreover, asserts that in case he does not get satisfactory drainage from the suprapubic cut or from a catheter tied in the urethra, then at

the end of three days he opens the base of the bladder and inserts a perineal tube. I consider this admission on Mr. Nicoll's part sufficient to condemn in great measure his procedure. If one of his elderly patients has to run the risk at the end of three days of having to submit to a secondary operation such as he describes, the chance of a fatal termination must be great. The chief danger in such a procedure would of course be from surgical shock and urinary suppression; although the breaking down of freshly formed granulations would also expose the patient to septic absorption.

In conclusion I would state that, other things being equal, the surgical procedure which can be accomplished quickest and with the use of the least anæsthetic, especially as regards elderly individuals, will give the best results and is the preferable operation. From what I can learn from my own investigations and from those who have seen both forms of enucleation tried, the method I have advanced of enucleation through the suprapubic wound is better in these respects than the perineal method, and consequently ought to be followed by less mortality.

Yours truly,

EUGENE FULLER.

NEW YORK, October 6, 1895.

Selections.

Notes on Affections of the Nails. (*Brit. Journal of Derm.*, vol. vii, No. 8, 1895.)

Dystrophy due to Perverted Innervation.—Case shown by Malcolm Morris at meeting of London Dermatological Society. The patient was an unhealthy boy of thirteen with a history of an antecedent universal eczema seven years and trichophytosis ten years ago. The nail disease appeared three years since. The nails of the left hand were three or four times thicker than normal, discolored, black at the free edge, which was ragged and brittle. Their surface was rough and pitted; they were separated from the bed for some distance from the free edge, and the ungual groove thickened and swollen. The boy complained of pain to the first interphalangeal joint and numbness of the ulnar side of the forearm. The enlargement was more noticeable on the outer fingers. On the right hand the ring finger only showed a beginning. There was no eczema, psoriasis, or ringworm on the body, and no trichophyton fungus could be discovered in the nail scrapings.

Abnormal Growth.—Two cases shown by Taylor and Eddowes at meeting of Dermatological Society of Great Britain and Ireland. The first patient was a woman from whose right index a nail had been removed which had grown to an inch in length, become rounded, and turned inward, resembling the condition seen in caged animals. The thumb showed the same condition following an injury. The second was a man whose toe nails were left untrimmed for twenty-five years. The nails of both great toes were six times their normal length, and curved backward, a result of the wearing of short boots. Two thirds of the matrix was affected. The appendages were worn

through holes in the shoes. Cauterization and complete ablation of the matrix were recommended.

Chronic Disease of the Nails.—Stowers. The woman, aged thirty-six, was anæmic and debilitated, in poor health for ten years past. Two years and a half ago the nail of the right index became speckled, indented at the free end, followed by thickening and partial separation from the bed. Pain and hyperæsthesia present. The nail was discolored, irregular in shape and structure, split longitudinally into plates. Beneath the nail lay an accumulation of epidermic *débris*. The longitudinal furrows did not reach the matrix, the attached part showing many grooves, white specks, and round pittings. The thumb nail of the same hand was next attacked. Here there was in addition a folding back, giving a concave appearance to the upper surface, the separation at the sides being greater than in the center. All the nails showed various stages in the affection, and the patient stated that the toes showed a similar condition two years ago, but have since recovered. The demonstrator's opinion inclined to a diagnosis of psoriasis unguium, which was only partly concurred in by other speakers. Pye-Smith maintained that the condition may occur independently of both eczema and psoriasis. Crocker thought the case more closely allied to eczema, and recommended the use of arsenic internally as having a selective action. J. C. J.

Gonorrhœa treated by Silver Nitrate. F. A. LYONS (*Medical Record*, May 4, 1895).

The author systematizes the treatment of gonorrhœa with injections of silver nitrate, for which he claims very rapid, satisfactory results with a minimum of complications and sequelæ. He has the patient urinate, which he deems sufficient for cleansing the canal, and with an ordinary soft-rubber conical-pointed clap syringe he injects a drachm of a four-per-cent solution of argent. nitras while the patient is in the recumbent posture. Enjoining the usual hygienic rules, the patient is ordered to return in twenty-four hours, when the author finds the discharge serous, usually containing no gonococci. Should some still be present, a two-per-cent solution is injected like the first. Some cases require a third injection.

The author says: ". . . It is a fair interpretation of the *rationale* of the action of this medicament to say that it stimulates the natural reaction of the tissues against the disease to still greater activity in clearing themselves more rapidly and completely of the germs that it has not reached directly to destroy."

Lyons reports fifteen cases so treated, which he classifies as follows: Three cases cured in one day, one case in two days, three cases in three days, one case in five days, two cases in six days, one case in eighteen days, two cases in four weeks, one case in six weeks, one case in five months. He attributes the prolonged cases to the patients' disobedience. FERD. C. VALENTINE.

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Annex

